

# Coercion from the Air: The United States' Use of Airpower to Influence End of Conflict Negotiations

A Monograph

by

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## Abstract

Coercion from the Air: The United States' Use of Airpower to Influence End of Conflict Negotiations, by Maj Jacob Duff, 43 pages.

This monograph examines how the United States employed air campaigns to influence end-of-conflict negotiations and the strategic landscape in the terminal stages of conflicts. Some of the last major combat operations during World War II, the Korean War, and the Vietnam War were airpower-centric operations intended to influence end-of-conflict negotiations. The increasing destruction brought to the Japanese mainland by the Twentieth Air Force and the shock of two atomic bombs drove the Japanese to surrender. In the months and days leading to the armistice in Korea, Far East Air Force (FEAF) aircraft undertook offensive operations against Communist forces and rendered unusable all runways in North Korea, with the intent of hampering post-conflict North Korean rearmament efforts. As the Paris Peace Accords floundered in late 1972, the United States used Operation Linebacker II to demonstrate resolve to the Republic of Vietnam and to induce the return of the Democratic Republic of Vietnam to the negotiating table. These case studies demonstrate evidence of air power's ability to produce significant coercive effects with acceptable levels of risk. This lends credibility to the oft-repeated claim that tactical and operational level air actions can produce strategic effects.

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## Acronyms

AAA	Anti-Aircraft Artillery
AAF	Army Air Forces
AN/APQ	Army/Navy Aircraft-mounted Radar, Combination
CAS	Close Air Support
ARVN	Army of the Republic of Vietnam
DRV	Democratic Republic of Vietnam
DMZ	Demilitarized Zone
FAC	Forward Air Controller
FEAF	Far East Air Force
JP	Joint Publication
JTF	Joint Task Force
NVA	North Vietnamese Army
OPLAN	Operation Plan
POW	Prisoner of War
ROK	Republic of Korea
RVN	Republic of Vietnam
SAM	Surface to Air Missile
SHORAN	Short Range Navigation
TNT	Trinitrotoluene
UN	United Nations
US	United States
USAF	United States Air Force
USMC	United States Marine Corps
VE	Victory in Europe

## Introduction

The final combat operations during World War II, the Korean War, and the Vietnam War were air power-centric operations intended to influence end-of-conflict negotiations. Beginning in March 1945, the increasing destruction brought upon the Japanese population and war-making capacity combined with the shock of two atomic bombs to drive the Japanese towards surrender. In the year leading up to the armistice in Korea, the Far East Air Force (FEAF) aircraft maintained constant pressure on Communist forces and, in the closing act of the war, rendered all runways in North Korea unusable, hampering post-conflict North Korean re-armament efforts. During the latter half of 1972, the United States used Operations Linebacker I and II to destroy North Vietnam's offensive war-making capability, demonstrating resolve to the Republic of Vietnam and compelling the return of the Democratic Republic of Vietnam to the negotiating table. During all three of these wars, the air operations enabled the United States to achieve favorable end-of-conflict resolutions.

This monograph will examine the use of airpower during the latter stages of three conflicts as a coercive measure to force negotiations and provide a position of relative advantage for United States diplomats. The concept of coercion in this monograph is taken from Robert Pape's book, *Bombing to Win*, and assumes that coercion is generally effective when it achieves one of two things: 1) threatens or employs force to inflict harm on the general population, or 2) exploits an enemy's military vulnerabilities, leaving it powerless to achieve political goals through military effort.<sup>1</sup> In an effort to link tactical and operational actions to strategic objectives, each case study will be examined using the ends-ways-means construct. The final section of this monograph will assess the strategic outcomes from the air campaigns, providing analysis that identifies common themes and the relative utility of air power when it comes to influencing end-of-conflict negotiations.

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<sup>1</sup> Robert Pape, *Bombing to Win* (Ithaca, NY: Cornell University Press, 1996), 1.



## Definitions

Military actions produce effects spanning all levels of warfare. To ensure clarity in the following case studies, it is important to define these levels of warfare and the analytical construct that will be utilized to examine these conflicts. Given the span of time covered by these three wars, it is difficult and potentially contradictory to attempt to use definitions that were contemporary with each case. To simplify the process, this paper will draw on definitions from current joint doctrine to provide a homogenous analytical and standard vocabulary.

Current joint doctrine identifies three levels of warfare: strategic, operational, and tactical. Joint Publication (JP) 1 defines the highest level of warfare as the strategic level. As defined in JP 1, strategy is “a prudent idea or set of ideas for employing the instruments of national power in a synchronized and integrated fashion to achieve theater and multinational objectives.” Strategy is informed by national policy and includes both national security and theater strategy. Inherent within this level of warfare are objectives that bear on the strategic situation.<sup>2</sup> Thus, when actions produce *strategic effects*, these actions provide a demonstrable effect in relation to the stated strategic objectives.

Before continuing to the subordinate levels of warfare, it is worthwhile to further examine the concept of strategy. In his book *Pure Strategy*, Everett Dolman argues that the concept of linking end states and objectives to strategy is overly reductive and fails to appreciate the nature of strategy itself.<sup>3</sup> When viewed in terms of a singular conflict, it may seem logical that a desired end state is both a reasonable expectation and an attainable aim, but this ignores the fact that a conflict never truly ends. The negotiations may conclude, the parties may sign a treaty, and the matter be

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<sup>2</sup> Joint Publication (JP) 1, *Doctrine for the Armed Forces of the United States* (Washington, DC: Government Printing Office, 2013), 1-7.

<sup>3</sup> Everett Carl Dolman, *Pure Strategy: Power and Principles in the Space and Information Age* (New York, NY: Routledge, 2005), 4.

considered closed, but opposing sides must live with the terms of the treaty daily, and will continue to interact with each other in any number of ways after the conclusion of military hostilities. Thus, strategy is a continuing process and states conduct their affairs in positions of advantage or disadvantage relative to friends, adversaries, and neighbors.<sup>4</sup>

Military strategies possess end states which identify when military hostilities cease in the near to mid-term, but strategy itself never rests. While both JP 1 and JP 3-0 use the term “end state” when discussing strategy, this paper avoids that term and utilizes the more appropriate and accurate term “objective.” There is less of a connotation of culmination associated with this term, which makes it more appropriate when discussing strategy because, as Carl von Clausewitz sagely pointed out, “even the ultimate outcome of war is not always considered final.”<sup>5</sup>

In JP 1, the operational level of warfare “links strategy and tactics by establishing operational objectives needed to achieve the military end states and strategic objectives.”<sup>6</sup> Intrinsic to this task is the act of sequencing tactical actions to achieve objectives at both the operational and strategic levels. Within this level of warfare, operational art constitutes “the cognitive approach by commanders and staffs—supported by their skill, knowledge, experience, creativity, and judgment—to develop strategies, campaigns, and operations to organize and employ military forces by integrating ends, ways, and means.”<sup>7</sup> *Ends* are the desired objectives or end state to be achieved by military actions, *ways* are sequences of actions required to achieve the stated ends, and *means* are the resources required to execute the sequence of actions.<sup>8</sup> The “ends, ways, and means”

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<sup>4</sup> Dolman, *Pure Strategy*, 6.

<sup>5</sup> Carl Von Clausewitz. *On War*, trans. and ed. by Michael Howard and Peter Paret, (Princeton: Princeton University Press, 1976), 80.

<sup>6</sup> Joint Publication (JP) 1, *Doctrine for the Armed Forces of the United States*, I-8.

<sup>7</sup> *Ibid.*, I-8.

<sup>8</sup> Joint Publication (JP) 3-0, *Joint Operations* (Washington, DC: Government Printing Office, 2011), II-4.

construct will be used to examine each of the case studies and frame the impact of air operations on the strategic landscape and end-of-conflict negotiations.

JP 1 defines the tactical level of warfare as the level at which “battles and engagements are planned and executed to achieve military objectives assigned to tactical units or joint task forces (JTFs).” Unlike the discussion of operations, the joint doctrine does not elaborate on the effects produced by tactical actions. However, the doctrine clearly outlines cases in which tactical actions can have operational, or strategic, “implications.”<sup>9</sup> Though not clearly stated, this implies that it is within the realm of possibility for tactical actions to produce operational or even strategic effects.

## Case Study One - Airpower and the Japanese Surrender in World War II

The United States approached the end of World War II in the Pacific with a clear political objective: unconditional surrender. The United States wanted the war to end as quickly as possible, with minimal loss of Allied lives. The Japanese had quietly indicated a willingness to discuss surrender terms, but had publicly rebuffed the Allied policy of unconditional surrender the Potsdam Conference reaffirmed.<sup>10</sup> The crushing strategic air campaign of early 1945 set the conditions for Japanese surrender. The atomic attack on Hiroshima, and the follow-on attack at Nagasaki three days later, provided the necessary impetus for the Japanese government to accept the terms of surrender that had been laid out at the Potsdam Conference.

The political situation between the United States and its allies leading up to the end of World War II was complex. The death of President Franklin D. Roosevelt on 12 April 1945 had thrust the relatively-unknown Harry Truman into the presidency, creating a significant amount of

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<sup>9</sup> Joint Publication (JP) 1, *Doctrine for the Armed Forces of the United States*, I-8.

<sup>10</sup> Wesley Frank Craven, ed., *The Army Air Forces in World War II: Volume Five: The Pacific: Matterhorn to Nagasaki, June 1944 to August 1945* (Chicago, IL: University of Chicago Press, 1953), 729-730.

anxiety in and around the new administration.<sup>11</sup> Truman had met with Roosevelt privately only twice since the 1944 election and Secretary of War Henry Stimson had intentionally kept the Vice President out of the loop on almost all important military matters.<sup>12</sup> Truman was similarly unprepared to handle diplomatic matters, as he was not briefed on the outcomes of the Yalta Conference.<sup>13</sup> Both Stimson and Secretary of State Charles Bohlen lacked confidence in Truman's capabilities and the tasks before him.<sup>14</sup> Despite the challenges, President Truman began his new role in a spirited and honest manner.<sup>15</sup> In short order, Truman effectively dealt with three immense strategic problems: concluding the war in Europe, establishing a new post-war European order that aligned with American interests, and shifting military focus to the war with Japan.

For many in the United States, taking revenge for the attack on Pearl Harbor presented a greater strategic imperative than the reconstruction of Europe.<sup>16</sup> Others realized the outcome in Japan was now just a matter of time and argued that a powerful Soviet Union presented the greatest threat to continuing American interests.<sup>17</sup> Regardless of public opinion, Victory in Europe (V-E) Day relieved some of the pressure on the Truman administration and allowed a more military focus on the fight in the Far East.

The critical meetings between allies that determined the course of the remainder of the war

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<sup>11</sup> Michael Neiburg, *Potsdam: The End of World War II and the Remaking of Europe* (New York, NY: Basic Books, 2015), 23.

<sup>12</sup> Neiburg, *Potsdam*, 13.

<sup>13</sup> Roosevelt's Russian interpreter claimed that Truman "...knew less than I did about United States foreign relations." Neiburg, *Potsdam*, 13.

<sup>14</sup> Neiburg, *Potsdam*, 24.

<sup>15</sup> *Ibid.*, 27.

<sup>16</sup> *Ibid.*, 37.

<sup>17</sup> *Ibid.*, 39.

took place at the Potsdam Conference during late July and early August 1945.<sup>18</sup> The successful test of the atomic bomb on 16 July 1945 played a large role in the way the American delegation approached the negotiation. A successful atomic test was so important to the American position that, in late April of 1945, Stimson urged President Truman to delay the Potsdam meetings until after the bomb had been validated.<sup>19</sup> At Potsdam, the primary goal of the United States regarding Japan was to ensure that the Soviet Union upheld the commitment it made at the Yalta conference to join in the war against Japan in the months following the conclusion of hostilities against Germany.<sup>20</sup> Once the Soviets reaffirmed their intent to join the war, the Allies sought to define the terms on which they would end hostilities with Japan. These terms came in the form of the Potsdam Declaration, signed by Truman, Churchill, and Chiang Kai-shek (but not signed by Stalin, as the Soviet Union had yet to enter the war).<sup>21</sup>

The Potsdam Declaration established the United States' strategic objectives regarding the conclusion of the war with Japan. The document consisted of thirteen declarative paragraphs, with the first five describing the global strategic situation as it pertained to the Allies and Japan.<sup>22</sup> The following eight paragraphs defined the terms of surrender that would be imposed by the Allies, including the caveat of non-negotiability. The document demanded the immediate cessation of all hostilities by Japan, the surrender of arms, the abandonment of occupied territories, the removal of

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<sup>18</sup> Gar Alperovitz, *Atomic Diplomacy: Hiroshima and Potsdam; The Use of the Atomic Bomb and the American Confrontation with Soviet Power* (New York: Simon and Schuster, 1965), 63.

<sup>19</sup> Alperovitz, *Atomic Diplomacy*, 107.

<sup>20</sup> The Soviets, looking to improve their strategic situation in the East and gain concessions from the Americans in the form of a share of the captured German merchant fleet, readily agreed to enter the war against Japan in line with promises already made. - Neiburg, *Potsdam*, 233.

<sup>21</sup> Neiburg, *Potsdam*, 245.

<sup>22</sup> Department of State, *Proclamation Calling for the Surrender of Japan, Approved by the Heads of Government of the United States, China, and the United Kingdom, No. 1328*. Foreign Relations of the United States: Diplomatic Papers, The Conference of Berlin (The Potsdam Conference), 1945, Volume II (Washington DC, 1945), 1475.

the war government, the punishment of war criminals, the potential for reparations, the occupation of the Japanese homeland, and a roadmap for a new democratic government for Japan.<sup>23</sup> It ended with an unambiguous threat of complete destruction if Japan did not agree to the Allied demands.<sup>24</sup>

What was referred to as “unconditional surrender” is more accurately described as the unconditional surrender of the *Japanese armed forces*. The term “unconditional” is only used once in the document in direct reference to the military, and most of the document set conditions limiting both the Japanese and the Allies. Of importance, the document included no condition to abolish the institution of the Emperor, which many American emissaries interpreted as the largest sticking point preventing the Japanese from engaging in negotiations.<sup>25</sup>

The Japanese’s reaction to the Potsdam Declaration was mixed. Within Japan, there existed a perceptible movement for a negotiated peace, but powerful nationalistic hardliners, mainly composed of senior military leaders, opposed peace overtures.<sup>26</sup> Japan’s premier, Baron Kantoro Suzuki, and foreign minister Shigenori Togo favored a moderate response to the Potsdam Declaration, but their more militaristic counterparts advocated a complete rejection of the terms. The lack of consensus led Suzuki to release a statement of “no comment” to the Japanese media, which the media reported as a statement of contempt for the Allied terms. Regardless of his previous intentions, Suzuki issued a follow-up statement that unmistakably stated Japan’s intent to continue the war.<sup>27</sup>

The United States’ strategic objectives were clear during the spring and summer of 1945. Victory in the war against Japan seemed like an increasingly forgone conclusion, but the manner of

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<sup>23</sup> Department of State, *Proclamation Calling*, 1476.

<sup>24</sup> Ibid.

<sup>25</sup> Alperovitz, *Atomic Diplomacy*, 28.

<sup>26</sup> John D. Chappell, *Before the Bomb: How America Approached the End of the Pacific War* (Lexington, KY: The University Press of Kentucky, 1997), 141.

<sup>27</sup> Chappell, *Before the Bomb*, 142.

the Japanese surrender remained uncertain. The Soviet Union had committed to entering the war, but had yet to end their non-aggression pact with Japan. Furthermore, the use of increasingly desperate, bloody, and dogged defensive tactics by the Japanese in the defense of Okinawa cast a dark shadow on any future invasion of the Japanese main islands.<sup>28</sup> The demands made in the Potsdam Declaration were the strategic objectives sought by the United States, and were naturally constructed in a manner to allow the United States to position itself strongly in a post-war Asia.

The “ways” established in the strategic bombing campaign against Japan were the eventual development of a contentious negotiation between the US Army and US Navy to determine the nature of the Pacific campaign.<sup>29</sup> In a bid to achieve control of the “Formosa - China Coast – Luzon” triangle, the US Army faction, led by General Douglas MacArthur, and the US Navy faction, led by Admiral Chester Nimitz, each proposed campaigns that would favor their respective axis of attack.<sup>30</sup> Both proposals also largely ignored the possibility of a strategic air campaign. General Hap Arnold, US Army Air Forces (AAF) Commander, casually suggested that the AAF would like to present its view of the Pacific campaign, and tasked Brigadier General Haywood Hansell to develop and present a plan. Arnold knew that Hansell, who had vigorously advocated for a strategic bombing campaign and sea blockade of Japan while on the Joint Planning Staff, would develop a campaign that relied on strategic bombing as one of its core principles. Hansell’s subsequent presentation was well received, and the joint staff developed a plan that accommodated aspects of both Macarthur’s and Nimitz’s plans, but also provided for the capture of the Marianas to use as air bases for attacks against Japan.<sup>31</sup> A naval blockade, using sea and air power, would

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<sup>28</sup> Robert J.C. Butow, *Japan’s Decision to Surrender* (Stanford, CA: Stanford University Press, 1954), 58.

<sup>29</sup> Haywood S. Hansell, *The Strategic Air War Against Germany and Japan: A Memoir* (Washington, DC: Office of Air Force History, 1986), 150.

<sup>30</sup> Ibid., 151.

<sup>31</sup> Hansell, *The Strategic Air War*, 152.

combine with strategic air attacks on Japan to destroy its ability to generate war-making power and reduce Japanese will.<sup>32</sup> The War Department activated Twentieth Air Force as the air branch to support this plan. The unprecedented command and control structure that resulted in the Twentieth reporting directly to the Joint Chiefs of Staff, rather than either of the theater commanders, signaled the air campaign's significance.<sup>33</sup>

Bombing of strategic targets in Japan began in earnest in November 1944, and the initial results proved disappointing as weather, inexperienced crews, and immature technology all took their toll.<sup>34</sup> While the early bombing of mainland Japan experienced growing pains, the AAF prepared for another mission: aerial mining operations to help enforce an air and sea blockade of Japan.<sup>35</sup> This was the first of two ways that eventually led to Japan's surrender as it lost its ability to produce war-making material.

The AAF was institutionally reluctant to participate in a mining campaign and hesitated to re-task airplanes and crews.<sup>36</sup> Admiral Nimitz, already committed to a blockade of Japan, was enthusiastic about the idea, and pressed Arnold to emplace mines as quickly as feasible. When Major General Curtis LeMay took command of XXI Bomber Command in January 1945, Nimitz and Arnold found a commander willing to commence a mining campaign as quickly as the weapons and crews became available.<sup>37</sup> Ironically, in some small measure, the AAF wanted to begin the mining campaign to prevent the Navy from developing its own long-range aircraft.<sup>38</sup>

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<sup>32</sup> Hansell, *The Strategic Air War*, 141.

<sup>33</sup> Wesley Frank Craven, ed., *The Army Air Forces in World War II: Volume Five: The Pacific: Matterhorn to Nagasaki, June 1944 to August 1945* (Chicago, IL: University of Chicago Press, 1953), 748.

<sup>34</sup> *Ibid.*, 559.

<sup>35</sup> *Ibid.*, 663.

<sup>36</sup> *Ibid.*, 664.

<sup>37</sup> Hansell, *The Strategic Air War*, 199.

<sup>38</sup> Craven, ed., *The Army Air Forces in World War II*, 664.



Twentieth Air Force preferred to employ its aircraft in a more traditional manner against strategic targets within the Japanese homeland. Like most air campaigns, the initial targets were selected to produce air superiority for United States forces. Aircraft plants in northwest Tokyo became the first targets. These early missions largely failed, with only one percent of the targeted building areas damaged.<sup>39</sup> As an example of the ineffectiveness of the early bombing campaign, bombers attacked Nakajima's Mushashino plant eight times, with little to no significant damage to the facility.<sup>40</sup> When conditions permitted, precision bombing techniques showed flashes of promise, but these periodic successes were not convincing.<sup>41</sup>

The exclusive focus on bombing aircraft manufacturing facilities during this phase of the campaign had a more decisive indirect effect on Japanese aircraft production. Due to a fear of their entire industry being destroyed, the Japanese made a "frantic" effort to disperse aircraft production into smaller workshops located in populated areas and away from heavy industrial targets. As strategic air attacks continued, Japanese aircraft production rates steeply declined. The physical effects of the attacks combined with dispersion-driven confusion to decrease aircraft engine production by seventy-five percent and airframe construction by sixty percent.<sup>42</sup>

While not abandoning the concept of selective targeting, in the spring of 1945, XXI Bomber Command commenced area attacks on major Japanese "urban industrial" targets in conjunction with precision attacks against key industries.<sup>43</sup> In total, area attacks struck sixty-six urban targets, constituting eighty percent of the bomb tonnage dropped on mainland Japan during the strategic bombing campaign.<sup>44</sup> These attacks dramatically influenced on the morale of the

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<sup>39</sup> Craven, ed., *The Army Air Forces in World War II*, 559.

<sup>40</sup> Ibid., 573.

<sup>41</sup> Ibid., 556.

<sup>42</sup> Hansell, *The Strategic Air War*, 225.

<sup>43</sup> Ibid., 232.

<sup>44</sup> Ibid., 234.

Japanese people, which was understandable as one single attack destroyed almost sixteen square miles of urban Tokyo and killed approximately 100,000 people.<sup>45</sup>

The combined effects of the naval blockade, successive bombing attacks, and the resultant Japanese dispersal efforts devastated Japan's war making capabilities. From September 1944 to July 1945, Japanese aircraft production dropped fifty-seven percent, army ordinance fifty-four percent, naval ordinance production fifty-six percent, merchant ship production eighty-two percent, naval ship production fifty-three percent, and motor vehicle production became virtually non-existent.<sup>46</sup> The blockade and bombing campaign brought the Japanese to the brink of collapse with startling rapidity.

In the Twentieth Air Force, the B-29 Superfortress was the primary means employed to prosecute the bombing campaign.<sup>47</sup> Built by Boeing, B-29 technology outpaced its predecessors, the B-17 and B-24. The B-29 was larger, flew faster, higher, and, most importantly, had a range that was more than twice that of the B-17 and almost fifty percent greater than the B-24.<sup>48</sup> This range was critical to the strategic bombing campaign, as launch and recovery fields were separated from targets in Japan by vast distances of the Pacific Ocean.<sup>49</sup> These bombers carried five primary munitions that enabled the air campaign in different ways. Payloads included high explosive bombs, incendiary bombs, anti-ship mines, leaflets, and, finally, atomic bombs.<sup>50</sup>

The munition that the B-29 was designed to employ was the general purpose, high explosive bomb, ranging in weight from 500-2000 pounds, and designed primarily to destroy

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<sup>45</sup> Craven, ed., *The Army Air Forces in World War*, 617.

<sup>46</sup> Hansell, *The Strategic Air War*, 249.

<sup>47</sup> Ibid., 143.

<sup>48</sup> Ibid., 288.

<sup>49</sup> Craven, ed., *The Army Air Forces in World War II*, 519.

<sup>50</sup> Ibid., 656, 665, 703.

industrial structures.<sup>51</sup> The high explosive bombs were doctrinally employed using high altitude precision bombing. This bombing technique relied on either visual meteorological conditions to allow for visual aiming, or the identification of target areas by a ground-mapping radar carried by the Superfortress. During the winter of 1944-1945, the cloud cover over Japan was usually too thick to accommodate visual aiming, and the AN/APQ-13 radar carried by the bombers was unreliable at high altitudes. The presence of the jet stream at high altitude over Japan, with a velocity reaching 200 knots, caused poor bombing accuracy.<sup>52</sup>

In early 1945, the combination of adverse weather conditions and poor results with high explosive munitions caused a shift in tactics. With the chances for successful precision bombing low during the poor spring weather, the decision was made to attack area targets. Area targets were best serviced with incendiary bombs, which were inherently inaccurate. This required the bombers to fly closer to the ground than in previous missions, which increased the threat of Japanese air defenses.<sup>53</sup> This, in turn, required night attacks, which provided several benefits. Japanese defenses were much less capable at night, as they lacked an adequate number of night fighters and the radars required to guide them. The weather over Japan at night was generally better, and the lower altitudes meant that bomber crews did not have to deal with the extreme wind velocities found at higher altitudes.<sup>54</sup> Because of this shift in tactics and the advantages associated with night operations, the fire-bombing campaign of large urban targets produced almost immediate success. The bombing of Tokyo on the night of 9/10 March 1945, in which 334 B-29s destroyed over half of

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<sup>51</sup> Hansell, *The Strategic Air War*, 179.

<sup>52</sup> Craven, ed., *The Army Air Forces in World War II*, 576.

<sup>53</sup> Ibid., 612.

<sup>54</sup> Ibid., 613.

Tokyo's industrial capacity, set a precedent for effectiveness that was only eventually curtailed by a lack of targets.<sup>55</sup>

Aerial anti-ship mining operations began on 27 March 1945. They focused on destroying and restricting the movement of an already beleaguered Japanese shipping and naval fleet.<sup>56</sup> Using a combination of acoustic, magnetic, and pressure mines, B-29s flew continual mining operations to establish and replenish minefields in and around Japanese waters between the end of March and 14 August 1945. These operations succeeded, accounting for over ten percent of total Japanese shipping losses in the war, even though they only lasted for approximately four and one-half months.<sup>57</sup> During this period, mines were the most destructive weapon against Japanese ships, accounting for half of the total tonnage sank.<sup>58</sup>

Leaflets dropped from B-29s also targeted the morale of the Japanese people in the closing months of World War II. To maximize psychological effects of the successful area bombing campaign, LeMay ordered a portion of his aircraft to warn multiple cities of impending fire attacks before striking them. The effect on the civilian population was "considerable."<sup>59</sup> The leaflets not only caused fear of imminent destruction, but proved to the Japanese people that their military forces were powerless to stop the American onslaught.<sup>60</sup> Leaflets dropped after the atomic attack on Hiroshima also informed the Japanese population of the magnitude of the threat they faced.<sup>61</sup>

Atomic bombs fell on Hiroshima and Nagasaki on 6 and 9 August 1945, ultimately ending the war. The first weapon, a gun-type with a fissile payload of Uranium 235, was dropped by the

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<sup>55</sup> Craven, ed., *The Army Air Forces in World War II*, 643.

<sup>56</sup> *Ibid.*, 667.

<sup>57</sup> *Ibid.*, 673.

<sup>58</sup> *Ibid.*, 674.

<sup>59</sup> *Ibid.*, 657.

<sup>60</sup> *Ibid.*, 657.

<sup>61</sup> *Ibid.*, 718.

*Enola Gay*, call sign - “Dimples Eight Two.”<sup>62</sup> The bomb had the equivalent explosive power of 12,500 tons of trinitrotoluene (TNT), and detonated 1,900 feet above the ground.<sup>63</sup> Blast damage alone *destroyed* 62,000 of the 90,000 buildings inside of Hiroshima.<sup>64</sup> Three days later, a B-29 named *Bock’s Car* dropped an implosion-type bomb with a fissile package made of Plutonium 239. The weapon detonated 1,650 feet above the slopes of Nagasaki with an equivalent force of 22,000 tons of TNT.<sup>65</sup>

President Truman wasted no time following the Hiroshima attack with another ultimatum to the Japanese, releasing a press document that stated, “If they do not now accept our terms they may expect a rain of ruin from the air, the like of which has never been seen on this earth.”<sup>66</sup> President Truman also commented directly on the use of the atomic bomb to reach policy aims during his radio address to the United States upon his return from the Potsdam conference. He stated that the attack on Hiroshima was “only a warning of things to come” and urged Japanese civilians to evacuate industrial areas before they were targeted with additional atomic bombs.<sup>67</sup> He also addressed the use of the bomb in terms of risk, stating, “We have used it in order to shorten the agony of war, in order to save the lives of thousands and thousands of young Americans.”<sup>68</sup>

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<sup>62</sup> Richard Rhodes, *The Making of the Atomic Bomb* (New York, NY: Simon and Schuster, 1986), 705.

<sup>63</sup> Ibid., 711.

<sup>64</sup> United States Strategic Bombing Survey Summary Report, *The Effects of Atomic Bombs on Hiroshima and Nagasaki* (Washington, DC: United States Government Printing Office, 1946), 9.

<sup>65</sup> Rhodes, *The Making of the Atomic Bomb*, 740.

<sup>66</sup> United States President, Press Release Number 180, “Statement by President Truman”. August 6, 1945, accessed August 20, 2016, <https://history.state.gov/historicaldocuments/frus1945v06/d401#fn:1.3.2.5.7.18.4.4.5.2>.

<sup>67</sup> Harry S. Truman, "Radio Report to the American People on the Potsdam Conference.," August 9, 1945. *The American Presidency Project*, accessed December 7, 2016, <http://www.presidency.ucsb.edu/ws/?pid=12165>.

<sup>68</sup> Ibid.

The decision to attack Japan with atomic weapons appears to have been a relatively easy one to make. Truman showed no hesitancy to employ the weapons when he met with other Allied leaders at Potsdam. He signed the order to drop the bomb on 25 July 1945, and there is no indication that countermanding orders were ever considered.<sup>69</sup> To not use the bomb risked the realization of an invasion of Kyushu, scheduled to begin in November of 1945.<sup>70</sup> The risks to the aircrew dropping the atomic bomb seemed minimal in comparison.

## Case Study Two - Air Power and the Korean War Armistice

The Far East Air Forces (FEAF) launched its first missions of the Korean war in the early morning of 26 June 1950 in support of an evacuation of military dependents in the Seoul and Inchon areas.<sup>71</sup> On 27 June, American fighters conducting defensive counter-air operations engaged and destroyed three North Korean fighter planes, marking the beginning of air combat operations that continued until the armistice that ended the fighting went into effect at 2201 hours on 27 July 1953.<sup>72</sup> The Korean War was unique in the amount of time it took from the beginning of armistice negotiations (23 June 1951) to the official date that the armistice went into effect.<sup>73</sup> During this two-year period, air power maintained a consistent pressure in the face an effectively stalemated ground campaign, and shaped the military conditions within North Korea to more favorably suit the United Nations (UN) mission in the period following the armistice.

The strategic objectives for the United States and its UN allies in the prolonged terminal phase of the Korean war were two-fold. First, the UN desired the implementation of an armistice,

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<sup>69</sup> Craven, ed., *The Army Air Forces in World War II*, 714.

<sup>70</sup> Chappell, *Before the Bomb*, 102.

<sup>71</sup> Robert F. Futrell, *The United States Air Force in Korea, 1950–1953* (Washington, DC: United States Government Printing Office, 1997), 8.

<sup>72</sup> *Ibid.*, 684.

<sup>73</sup> William H. Vatcher Jr., *Panmunjom: The Story of the Korean Military Armistice Negotiations* (New York, NY: Frederick A Praeger, Inc., 1958), 20.

incorporating a cessation of hostiles and exchange of prisoners.<sup>74</sup> The second objective, developed after the terms of the armistice had been finalized, but before it went into effect, was to limit North Korea's ability to generate new combat power after the cessation of hostilities.<sup>75</sup> The FEAF significantly influenced these objectives during both the long process of negotiations and in the final hours of hostilities.

Secretary of States Dean Acheson delivered the first published guidance for the strategic objectives associated with a cease fire to the United States Mission at the UN on 15 December 1950, barely six months after the initiation of hostilities.<sup>76</sup> The guidance included eight objectives: 1) an immediate cessation of hostilities, 2) the establishment of a Demilitarized zone (DMZ) along the 38th parallel, 3) withdrawal of hostile forces from their respective enemy's territories, 4) prohibition on the introduction of any new military forces by any actors into the theater, and, 5) exchange of prisoners of war (POWs). The last three objectives established the UN as the governing body responsible for ensuring compliance with the terms of the armistice.<sup>77</sup>

On 2 February 1951, Assistant Secretary of State for Far Eastern Affairs Dean Rusk held a meeting with diplomatic representatives from most of the UN members involved in combat operations in Korea. During the meeting, Rusk outlined the situation on the ground in Korea, highlighting the belief that enemy ground forces were too large and too easily reinforced for the committed UN forces to expect a successful invasion and lasting occupation of North Korea. On the

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<sup>74</sup> Office of the Historian, Department of State, *Memorandum of Conversation, by Messrs. Barbour and Hackler of the Bureau of Far Eastern Affairs, February 2, 1951*. Foreign Relations of the United States, 1951, Korea and China: Volume VII, Part 1, Document 121 (Washington, DC, 1950).

<sup>75</sup> Futrell, *The United States Air Force in Korea*, 680.

<sup>76</sup> Office of the Historian, Department of State, *The Secretary of State to the United States Mission at the United Nations, December 15, 1950*, Foreign Relations of the United States, 1950. Korea: Volume VII, Document 1054 (Washington, DC, 1950).

<sup>77</sup> Office of the Historian, Department of State, *The Secretary of State to the United States Mission at the United Nations*.

other hand, UN naval and air superiority ensured that Communist forces were unlikely to mount a decisive operation to expel UN forces from the peninsula.<sup>78</sup> The United States did not anticipate major ground operations extending north of the 38th parallel and proposed that latitudinal demarcation as an acceptable cease-fire location. Rusk reemphasized the fourth objective detailed in the proposed armistice (the prohibition of new combat power) as crucial to ensuring that a cease fire would not be overly advantageous to the Communist forces.<sup>79</sup>

The objectives stipulated in late 1950 and early 1951 would change and be partially mitigated by Communist counter-demands during the two-year long armistice negotiation. Eventually, the armistice centered around three major agreements: 1) the establishment of a DMZ roughly coincident with the 38th parallel, 2) the cessation of hostilities, and, 3) the return of POWs. The second article of the armistice included the limitations on the introduction of reinforcing military personnel (Section A, part *b*) and the introduction of reinforcing combat equipment such as aircraft, armored vehicles, weapons, and ammunition (Section A, part *c*).<sup>80</sup>

Both sides understood the implications of these limitations and developed courses of action to place themselves in a position of post-conflict advantage. To maximize its combat power in the immediate aftermath of the armistice, North Korea would have to bring as much combat power as possible inside its borders prior to the implementation of the terms of the armistice. The UN forces wanted to place themselves and their Republic of Korea (ROK) allies in the best possible position during the armistice in case the hostilities resumed before a peace settlement could be produced and ratified. This would require hampering North Korean efforts to build combat power before the

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<sup>78</sup> Office of the Historian, Department of State, *Memorandum of Conversation, by Messrs. Barbour and Hackler*.

<sup>79</sup> Ibid.

<sup>80</sup> Vatcher, *Panmunjom*, Appendix V: Text of Armistice Agreement.



armistice, thus maintaining the qualitative and quantitative advantages in airpower enjoyed by UN forces.<sup>81</sup>

Ultimately, the strategic objectives pursued by the United States were centered around reducing the costs of dealing with the Korea problem in both the near and long term. The United States was primarily concerned with the signing of an armistice. The UN and the ROK wanted to be in an advantageous position as the armistice went into effect. In the end, both strategic objectives would be addressed by the FEAF in its air campaign.

The “ways” used by UN air forces consisted of over one million sorties during the Korean War, averaging just under nine hundred sorties every day.<sup>82</sup> Close air support and “general support” missions targeted enemy forces within twenty kilometers of the front lines, interdiction missions attacked logistics moving towards the front lines, and strategic attack missions targeted North Korean infrastructure and war-making capability.<sup>83</sup> While armistice negotiations were ongoing during the conflict’s last two years, this paper examines the methods employed by UN air forces during the last year of the conflict.

The amount of UN air power available for close air support generally increased throughout the war. By the fall of 1952, the fire control measures placed on FEAF and other air power assets by the Eighth Army hampered the effectiveness of massed strikes on enemy positions far forward of friendly outposts, but still inside the fire coordination line. At the request of Fifth Air Force, the Eighth Army agreed to reduce the close air support coordination line to 3,000 meters and designated the area between 3,000 meters and twenty-five miles in front of the friendly troops as a “general support” area. This new coordination measure allowed for massing of airpower in very

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<sup>81</sup> Futrell, *The United States Air Force in Korea*, 680.

<sup>82</sup> Conrad C. Crane, *American Airpower Strategy in Korea, 1950-1953* (Lawrence, KS: University Press of Kansas, 2000), 156.

<sup>83</sup> Wayne Thompson and Bernard C. Nalty, *Within Limits: The U.S. Air Force and the Korean War* (Washington, DC: US Air Force Historical Support Office, 1996), 44.

short time frames and led to Eighth Army officers referring to this new construct as “airpower’s most potent contribution to the Korean war in its present static-front condition.”<sup>84</sup>

Close air support was particularly busy during the last month of the conflict helping to stall a ground attack intended to improve the Communist bargaining position. The offensive began with a feint on 28 May 1953 with the main attack commencing on 10 June against the ROK II Corps near Kumsong.<sup>85</sup> Close air support struggled with overcast weather conditions until 15 June, when a break in the weather allowed UN air forces to launch a record 1,869 close air support sorties in a single day, assisting the Eighth Army in stabilizing its lines by 19 June.<sup>86</sup>

Interdiction sorties account for at least twenty-five percent of total sorties flown during the length of the war.<sup>87</sup> In theory, the long lines of communication stretching from the Yalu to the front provided a lucrative target set for UN air power. However, Communist forces proved adept at night movements and repairing damaged roads and railways.<sup>88</sup> Conversely, after the first year of the war, the Communist forces were never able to launch a ground attack that presented any serious threat to the existence of UN and ROK forces on the peninsula, largely due to the air interdiction efforts.<sup>89</sup>

By the spring of 1952, there were few obvious strategic military targets left in North Korea. To increase pressure on the Communists, two new targets sets were developed and attacked: irrigation dams and hydroelectric power facilities. In May 1952, UN air forces attacked three irrigation dams, bursting two, causing significant damage to young rice crops and washing out one of the two main rail lines leading into Pyongyang.<sup>90</sup> In June 1952, UN air forces attacked

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<sup>84</sup> Futrell, *The United States Air Force in Korea*, 619.

<sup>85</sup> Ibid., 673.

<sup>86</sup> Ibid., 674.

<sup>87</sup> Ibid., 690.

<sup>88</sup> Wayne Thompson and Bernard C. Nalty, *Within Limits*, 48.

<sup>89</sup> Crane, *American Airpower Strategy in Korea*, 130.

<sup>90</sup> Futrell, *The United States Air Force in Korea*, 668.

hydroelectric power generation facilities.<sup>91</sup> The dams themselves were deemed too difficult to destroy, so efforts focused on the destruction of supporting infrastructure. Within four days of commencing operations, 1,276 US Navy and US Air Force fighter-bomber sorties reduced North Korea's power generation capabilities by ninety percent.<sup>92</sup> The following month, strikes against North Korean communications nodes, supply concentration centers, and vehicle repair areas within towns and cities began in earnest, with more than thirty "maximum effort air strikes" conducted on these targets in the latter half of 1952.<sup>93</sup>

As the armistice approached and the likelihood for the cessation of hostilities increased, both sides focused efforts on achieving positions of relative strategic advantage. North Korean airfields had been rendered unusable early in the war, but in the weeks leading up to the armistice, there were concerted effort to repair the runways to facilitate an influx of aircraft into North Korea to build an air order of battle prior to the cease fire.<sup>94</sup> Accordingly, UN forces began to strike and restrike those airfields to prevent them from receiving aircraft. During a National Security Council meeting on 6 May 1953, Chairman of the Joint Chiefs General of the Army Omar Bradley briefed the president on these efforts. President Eisenhower, aware of the ramifications of increased Chinese airpower in North Korea, raised the possibility that these airfields could be struck with atomic bombs, but General Bradley immediately demurred and pointed out that atomic weapons were unlikely to have the effect that the president envisioned.<sup>95</sup> On 19 July 1953, FEAF received a

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<sup>91</sup> Crane, *American Airpower Strategy in Korea*, 118.

<sup>92</sup> A significant portion of the power generated by these facilities was transmitted to industry in Manchuria, so the attacks, ostensibly performed against North Korean targets, had an impact on China as well. For more, see Crane, *American Airpower Strategy in Korea*, 119.

<sup>93</sup> Crane, *American Airpower Strategy in Korea*, 124.

<sup>94</sup> Futrell, *The United States Air Force in Korea*, 680.

<sup>95</sup> Office of the Historian, Department of State, *Document 500: Memorandum of Discussion at the 143d Meeting of the National Security Council Wednesday, May 6, 1953*, Foreign Relations of the United States, 1952–1954, Korea, Volume XV, Part 1, (Washington, DC, 1953).

warning that the armistice was imminent, and a maximum effort was begun to render all runway surfaces in North Korea unusable and destroy any aircraft on the ground.<sup>96</sup> On 27 July, reconnaissance flights revealed that all thirty airfields in North Korea were unsuitable for jet aircraft at the time the armistice went into effect.<sup>97</sup>

This air campaign was coincident with increasingly belligerent rhetoric from the Eisenhower administration. Shortly after taking office, Eisenhower emphasized that the patience of the United States was waning, and that stronger measures needed consideration.<sup>98</sup> The administration and UN command in Korea were not bluffing, as strategic planners designed Operational Plan (OPLAN) 8-52 to achieve military victory if the armistice talks failed.<sup>99</sup> OPLAN 8-52 called for air and naval attacks in Manchuria and China and a three-phase ground campaign to take territory up to the “waist” of North Korea.<sup>100</sup> The plan initially did not rely on atomic weapons, but was later modified to incorporate their use against appropriate targets.<sup>101</sup>

UN airpower, through close air support, interdiction, and strategic attack campaigns, maintained an active pressure on Communist forces throughout the last year of the Korean War while ground forces were effectively stalemated. This firepower limited the tactical options for Communist forces and, combined with increasingly hostile rhetoric from the Eisenhower administration, drove Communist forces towards an armistice.

The means for the strategic attack, interdiction, and close air support campaigns constituted strategic bombers, attack aircraft, or repurposed fighter aircraft. These aircraft met with varying

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<sup>96</sup> Futrell, *The United States Air Force in Korea*, 683.

<sup>97</sup> Ibid., 682.

<sup>98</sup> Ibid., 647.

<sup>99</sup> Crane, *American Airpower Strategy in Korea*, 155.

<sup>100</sup> Ibid., 156.

<sup>101</sup> Ibid., 157.

degrees of success as air commanders updated tactics to deal with aggressive enemy efforts to disrupt the air campaign.<sup>102</sup>

For heavy bombing missions, FEAF relied on World War II-era B-29s, whose operations were restricted by the presence of enemy MiG-15s.<sup>103</sup> These missions depended on the Short Range Navigation (SHORAN) system that utilized ground-based emitters to enable equipped aircraft to triangulate their position and achieve accurate navigational fixes during bombing runs.<sup>104</sup> This was an improvement over World War II night bombing techniques and facilitated increased targeting precision in almost all weather conditions with reasonable accuracy.<sup>105</sup> However, this system required precise, inflexible attack routes and the onboard SHORAN transceivers interfered with defensive jamming equipment.<sup>106</sup>

Smaller bombers, such as the B-26, and repurposed fighter aircraft like the F-84, F-7F, and F-9F, provided the UN forces with strike platforms that generally outperformed the B-29s in bombing accuracy.<sup>107</sup> These aircraft supported all air-to-ground mission sets to include strategic attack, interdiction, and close air support. The efforts of naval-carrier based and United States Marine Corps (USMC) fighter/attack aircraft complemented the United States Air Force (USAF) throughout the war.<sup>108</sup> These aircraft performed both day and night operations, and largely relied on visual bombing techniques to acquire and attack targets.<sup>109</sup> During the closing months of the war,

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<sup>102</sup> Air Force History and Museums Program, *Steadfast and Courageous: FEAF Bomber Command & The Air War in Korea 1950-1953* (Washington, DC: Department of the Air Force, 2000), 44.

<sup>103</sup> Air Force History and Museums Program, *Steadfast and Courageous*, 1.

<sup>104</sup> *Ibid.*, 40.

<sup>105</sup> *Ibid.*, 45.

<sup>106</sup> *Ibid.*, 44.

<sup>107</sup> Futrell, *The United States Air Force in Korea*, 624.

<sup>108</sup> *Ibid.*, 615.

<sup>109</sup> Thompson and Nalty, *Within Limits*, 46.

the attacks on irrigation dams and hydroelectric power facilities were all accomplished with the smaller, more accurate fighter-bombers, which had the ability to mass on selected targets during daylight hours without the vulnerability to enemy counter-air operations that the heavy bombers experienced.<sup>110</sup> The responsiveness and accuracy of these smaller aircraft proved critical in close air support missions, and they again proved their worth during the closing days of the war by assisting defending ground forces in stabilizing the lines after the Communist ground offensive in June 1953.<sup>111</sup>

UN forces generally enjoyed air superiority throughout the last year of the war, and their ground forces rarely came under attack from enemy air power, with the last US casualties from enemy air attacks occurring on 15 April 1953.<sup>112</sup> The UN air forces, utilizing a wide variety of aircraft types and almost as many mission sets, maintained pressure on Communist forces and incentivized the conclusion of an armistice.

The Korean War was a limited war fought for limited strategic objectives. As a result, the ways and means that the United States employed were limited in nature. When examining risk through this lens, the fundamental issue is the balance of assumed risk to the air campaign and the aircrews prosecuting it, against the presumed risk of a strategy more reliant on ground campaigns. Based on the cost of American casualties in the first year of the war, when major ground battles were frequent, the decision to assume a less-dynamic ground campaign and increase the reliance on airpower (and firepower in general) to attrit the Communist forces was the less risky of the two primary options.<sup>113</sup>

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<sup>110</sup> Futrell, *The United States Air Force in Korea*, 669.

<sup>111</sup> Ibid., 674.

<sup>112</sup> Ibid., 663.

<sup>113</sup> James F. Schnabel, *United States Army in the Korean War: Policy and Direction: The First Year of the War* (Washington, DC: Center of Military History, 1971), 405.

## Case Study Three – Linebacker Operations and The Paris Peace Accord

In 1968, Richard Nixon campaigned for the presidency with a plan to end the Vietnam conflict in a manner that would be acceptable to the American people.<sup>114</sup> Peace negotiations had intermittently occurred since 1968; and by late 1971, the negotiations showed promise. At that time the United States was meeting strategic objectives: casualty numbers were dropping, troop levels were decreasing, South Vietnam appeared to be in good shape militarily, and China and the Soviet Union showed little interest in increasing support for the Democratic Republic of Vietnam (DRV).<sup>115</sup> On 30 March 1972, this strategic outlook changed when masses of conventional troops and armor poured south out of the DRV, leading Nixon to order General John Vogt, the Seventh Air Force commander, to “get down there and use whatever air you need to turn this thing around.”<sup>116</sup> Following what became known as Operation Linebacker I, and the destruction of a significant portion of its military capabilities, the DRV once again participated in substantive negotiations.<sup>117</sup> Progress stalled again in November 1972, largely due to intransigence by the Republic of Vietnam (RVN).<sup>118</sup> Airpower, in the form of Operation Linebacker II, exerted new pressure on the DRV, ultimately resulting in the signing of the Paris Peace Accords on 27 January

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<sup>114</sup> Earl H. Tilford Jr., *Crosswinds: The Air Force's Setup in Vietnam* (College Station, TX: Texas A&M University Press, 1993), 104.

<sup>115</sup> Marshall L. Michel III, *The Eleven Days of Christmas: America's Last Vietnam Battle* (New York, NY: Encounter Books, 2002) Days, 22.

<sup>116</sup> Earl H. Tilford Jr., *Setup: What the Air Force Did in Vietnam and Why* (Maxwell Air Force Base, AL: Air University Press, 1991), 228.

<sup>117</sup> Tilford, *Setup*, 236.

<sup>118</sup> Office of the Historian, Department of State, *Document 171: Message from the President's Assistant for National Security Affairs (Kissinger) to the President's Deputy Assistant for National Security Affairs (Haig), December 13, 1972*, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1972).

Both Linebacker operations ultimately achieved the limited aim of forcing the DRV into meaningful negotiations.

The Easter Offensive, known in Vietnam as the “Nguyen Hue Offensive,” began on 30 March 1972 and consisted of fourteen divisions and twenty-six separate regiments invading the RVN.<sup>120</sup> The mood in Washington was one of surprise and trepidation as civilian leaders sharply blamed military leaders, who in turn imposed culpability on their RVN counterparts.<sup>121</sup> The sudden reversal muddled a complex strategic environment in which American support for the war had floundered, Nixon faced a re-election campaign, and the President’s Assistant for National Security Affairs, Henry Kissinger, struggled to maintain the relationships he had built with the Soviet and Chinese governments.<sup>122</sup> By late 1972, Nixon faced a dilemma in funding as the newly-elected Congress threatened to reduce or cut off war funding when it convened in January.<sup>123</sup> During both moments of crisis, the paramount strategic objective of the United States was to produce a situation in which it would be possible for the American military to completely withdraw from Vietnam without jeopardizing the near-term existence of the RVN. During the Easter Offensive, DRV

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<sup>119</sup> Office of the Historian, Department of State, *Document 341: Telegram from the U.S. Delegation to the Paris Peace Talks to the Department of State, January 27, 1972*, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1973).

<sup>120</sup> Tilford, *Setup*, 224.

<sup>121</sup> Office of the Historian, Department of State, *Document 50: Conversation Between President Nixon and the President’s Assistant for National Security Affairs (Kissinger), April 3, 1972*, Foreign Relations of the United States, 1969–1976, Volume VIII, Vietnam, January–October 1972 (Washington, DC, 1972).

<sup>122</sup> Office of the Historian, Department of State, *Document 57: Conversation Between President Nixon and the President’s Assistant for National Security Affairs (Kissinger), April 4, 1972*, Foreign Relations of the United States, 1969–1976, Volume VIII, Vietnam, January–October 1972 (Washington, DC, 1972).

<sup>123</sup> Office of the Historian, Department of State, *Document 175: Conversation Among President Nixon, the President’s Assistant for National Security Affairs (Kissinger), and the President’s Deputy Assistant for National Security Affairs (Haig), December 14, 1972*, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1972).



military forces had to be neutralized to compel North Vietnam to resume negotiations. During the stalemate of December intense bombing threatened the safety of North Vietnam, forcing negotiations to resume.

The North Vietnamese offensive in the spring and summer of 1972 caused tremendous political pressure. During a conversation with Kissinger, Nixon was adamant about the outcome, saying, “we aren’t going to lose this damn thing.” He aggressively cajoled military leaders to increase the pressure on DRV military forces.<sup>124</sup> At that moment, the strategic objective seemed to be a simple desire not to “lose” the war. As the situation cooled, and the imminent threat to the existence of the RVN seemed less pressing, clearer strategic objectives emerged. One primary objective was the maintenance of the relationship that the Nixon administration had established with the Soviet Union. To that end, planners carefully vetted targets in the heart of the DRV for negative political repercussions.<sup>125</sup> At the same time, Nixon clearly sought to punish the DRV by destroying as much of its military capability as quickly as possible.<sup>126</sup> In a remarkably candid exchange with Kissinger, Nixon expressed his strategic aims for Vietnam in crystal clear terms: he was unwilling to let the DRV control the whole of Vietnam while he had the power to do something about it. Paradoxically, he was willing to destroy the entire country of North Vietnam, stating, “I mean that we will bomb the living bejeezus out of North Vietnam, and then if anybody interferes we will threaten the nuclear weapon.” At the same time, he was willing to abandon the RVN to its

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<sup>124</sup> Office of the Historian, Department of State, *Document 58: Conversation Between President Nixon and the President’s Assistant for National Security Affairs (Kissinger), April 4, 1972*, Foreign Relations of the United States, 1969–1976, Volume VIII, Vietnam, January–October 1972 (Washington, DC, 1972).

<sup>125</sup> Office of the Historian, Department of State, *Document 86: Conversation Between President Nixon and the President’s Assistant for National Security Affairs (Kissinger), April 18, 1972*, Foreign Relations of the United States, 1969–1976, Volume VIII, Vietnam, January–October 1972 (Washington, DC, 1972).

<sup>126</sup> Ibid.

own devices.<sup>127</sup> Nixon recognized that the destruction of DRV military capabilities would enhance the bargaining position of American negotiators.

By the fall, the situation had improved to such an extent that by 12 October 1972, during a meeting with Nixon, Kissinger reported that an agreement had been reached that was “far better than anything we dreamt of.” Unfortunately, the agreement had not yet been vetted through South Vietnam President Nguyen Thieu.<sup>128</sup> Thieu’s response to the American/North Vietnamese proposal was to submit counter demands that, in Kissinger’s words, “verge on insanity.”<sup>129</sup> The DRV saw the counter proposal as an indication of a strategic split between the United States and the RVN. Following the 1972 elections where Nixon retained the White House but lost congressional support, the DRV sensed increasing domestic pressure on Nixon and stalled negotiations in search of conditions more to their advantage.<sup>130</sup> By this point, the singular strategic objective that drove the Nixon administration was the signing of the agreement nearly reached in early October.<sup>131</sup> Kissinger stated in a note to his deputy, Alexander Haig, that Thieu’s inflexibility caused the United States to lose leverage against North Vietnam, which no longer had a pressing desire to conclude peace negotiations.<sup>132</sup> President Nixon was adamant that the situation be resolved, telling Kissinger,

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<sup>127</sup> Office of the Historian, Department of State, *Document 88: Conversation Between President Nixon and the President’s Assistant for National Security Affairs (Kissinger), April 18, 1972*, Foreign Relations of the United States, 1969–1976, Volume VIII, Vietnam, January–October 1972 (Washington, DC, 1972).

<sup>128</sup> Office of the Historian, Department of State, *Document 9: Editorial Note, October 12, 1972*, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1972).

<sup>129</sup> Office of the Historian, Department of State, *Document 43: Backchannel Message from the President’s Assistant for National Security Affairs (Kissinger) to the President’s Deputy Assistant for National Security Affairs (Haig), October 22, 1972*, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1972).

<sup>130</sup> Tilford, *Crosswinds*, 163.

<sup>131</sup> *Ibid.*, 152.

<sup>132</sup> Office of the Historian, Department of State, *Document 163: Message from the President’s Assistant for National Security Affairs (Kissinger) to the President’s Deputy Assistant*

“This war must end! It must end soon! And if they don’t want to talk, we will have to go get ’em. If they won’t return our prisoners, we want to hit them soon. We’re going to take the necessary military action to get them back.”<sup>133</sup> In order to compel the DRV to sign the peace accords, reapplying military power in the form of airpower reemerged as the favored strategy.

The strategic situations in the spring and winter of 1972 were different, but the overarching strategic object of the United States remained constant: to conclude an honorable peace in Vietnam and detangle the United States from the war. Viewing the ways employed during Operations Linebacker I and Linebacker II lends credence to Robert Pape’s theory about the use of airpower for coercive purposes by either destroying an enemy’s military forces or threatening the population with suffering.<sup>134</sup> During Linebacker I, the air campaign focused initially on the defeat and subsequent destruction of fielded DRV military forces and then broadened to include attacks on North Vietnam’s war making capabilities.<sup>135</sup> The Linebacker II strikes of late 1972 attacked targets in the most heavily-defended portions of North Vietnam, including its capitol, and in doing so exposed the entire population of North Vietnam to risk.<sup>136</sup> The operational approach of the two campaigns differed significantly, reflecting the different strategic and operation environments.

Linebacker I began on 8 May 1972, more than a month after the North Vietnamese invasion commenced.<sup>137</sup> Until that point, airpower was largely busy in South Vietnam conducting close air support missions in support of RVN ground forces that faced operational and strategic

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*for National Security Affairs (Haig), December 12, 1972, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1972).*

<sup>133</sup> Office of the Historian, Department of State, *Document 175*.

<sup>134</sup> Pape, *Bombing to Win*, 5.

<sup>135</sup> Mark Clodfelter, *The Limits of Airpower: The American Bombing of North Vietnam* (Lincoln, NE: University of Nebraska Press, 1989), 153-154.

<sup>136</sup> Clodfelter, *The Limits of Airpower*, 195.

<sup>137</sup> Tilford, *Setup*, 228.

defeat at the hands of large conventional DRV forces.<sup>138</sup> During those early days, the US military had to balance the demand for airpower against political pressure to begin bombing parts of North Vietnam, tactical requirements for CAS, and overcast cloud decks that made effective bombing difficult in either case.<sup>139</sup> As the Easter Offensive stalled, and was eventually pushed back, there was greater freedom for air assets to strike targets in the DRV. As early as 5 April, DRV supply dumps in North Vietnam came under attack, but these interdiction sorties showed little to no effect on the flow of communist forces south. This ineffectiveness led Nixon and his advisors to the conclusion that strikes on major military targets in the northern part of the DRV, especially Hanoi and Haiphong, would compel the North Vietnamese to halt their offensive.<sup>140</sup> In mid-April, the use of heavy “strategic” bombers was approved to show the DRV that the United States was serious, and that “things might get out of hand if the offensive did not stop.”<sup>141</sup>

When Linebacker I commenced in May one of the first targets was Haiphong harbor. Carrier-based aircraft seeded the mines minutes before President Nixon went on live television to announce a stepped-up air campaign. Chairman of the Joint Chiefs Admiral Thomas Moorer defined the operational goals of Linebacker I as: 1) the destruction of war material in North Vietnam, 2) preventing the flow of war material within Vietnam, and 3) the interdiction of combat troops and material from the DRV into combat areas of South Vietnam, Laos, and Cambodia.<sup>142</sup> In a memorandum to Kissinger, Nixon spelled out the operational approach of Linebacker I, specifically stating that, in conjunction with the mining of the Haiphong harbor, targets such as

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<sup>138</sup> Pape, *Bombing to Win*, 197.

<sup>139</sup> Office of the Historian, Department of State, *Document 47: Editorial Note: Various Conversations, April 1, 1972*, Foreign Relations of the United States, 1969–1976, Volume VIII, Vietnam, January–October 1972 (Washington, DC, 1972).

<sup>140</sup> Clodfelter, *The Limits of Airpower*, 154.

<sup>141</sup> Henry Kissinger and Clare Boothe Luce, *White House Years* (Boston, MA: Little, Brown, 1979), 1118.

<sup>142</sup> Clodfelter, *The Limits of Airpower*, 158.

power plants, petroleum storage facilities, and rails lines received the highest prioritization.<sup>143</sup> The goal was to “completely deny to the enemy the supplies it needs to wage aggressive war” and to hit targets that “will have maximum psychological effect on morale in North Vietnam.”<sup>144</sup> Over the summer of 1972, Operation Linebacker I became increasingly successful, primarily due to a reduction in targeting constraints and the introduction of new technologies to the battlefield that drastically improved bombing effectiveness.<sup>145</sup>

Linebacker II was a much shorter operation, only eleven days, and had a different operational focus than its predecessor. While Linebacker I had targeted North Vietnam’s ability to wage war, Linebacker II focused on destroying the DRV’s will to continue the conflict.<sup>146</sup> In a lengthy conversation with Kissinger and Haig on 14 December, Nixon decided that additional pressure, in the form of aggressive air attacks on military and infrastructure targets in North Vietnam, particularly Hanoi and Haiphong, would be necessary to encourage the North Vietnamese to return to the negotiating table with the motivation for a peace settlement.<sup>147</sup> While that meeting occurred, Admiral Moorer prepped commanders in Vietnam to prepare a “maximum effort” air campaign against all significant targets in North Vietnam, characterizing the desired operation as a “major effort which has a psychological impact” using “as many B-52s as possible.”<sup>148</sup>

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<sup>143</sup> Office of the Historian, Department of State, *Document 139: Memorandum from President Nixon to the President’s Assistant for National Security Affairs (Kissinger), May 9, 1972*, Foreign Relations of the United States, 1969–1976, Volume VIII, Vietnam, January–October 1972 (Washington, DC, 1972).

<sup>144</sup> Office of the Historian, Department of State, *Document 139*.

<sup>145</sup> Clodfelter, *The Limits of Airpower*, 161.

<sup>146</sup> *Ibid.*, 177.

<sup>147</sup> Office of the Historian, Department of State, *Document 175: Conversation Among President Nixon, the President’s Assistant for National Security Affairs (Kissinger), and the President’s Deputy Assistant for National Security Affairs (Haig), December 14, 1972*, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1972).

<sup>148</sup> Office of the Historian, Department of State, *Document 176: Transcript of a Telephone Conversation Between the Chairman of the Joint Chiefs of Staff (Moorer) and the Deputy*

Linebacker II focused on targets in heavily-defended urban centers of North Vietnam and the heavy use of strategic bombers to deliver maximum destructive and morale effects. The first three nights of the campaign, beginning on December 18, were virtual carbon copies of each other, with streams of bombers, supported by tactical enablers, arriving over Hanoi to destroy infrastructure and military targets.<sup>149</sup> The fourth night engaged the same targets in the Hanoi area, but shifted flight tracks in an attempt to mitigate US losses to air defenses.<sup>150</sup> Night five saw the bombers attack Haiphong-area targets, with fewer bombers (thirty) than previous raids.<sup>151</sup> Night six attacked targets even further from Hanoi, focusing on rail repair centers and storage areas near Lang Dang.<sup>152</sup> On 26 December, after a Christmas break in operations, United States bombers changed tactics and once again attacked Hanoi. Nights seven and eight witnessed the USAF abandoning long bomber streams and relying on raids of extremely short duration (fifteen minutes) where multiple groups of bombers attacked from different directions and at different altitudes. These raids employed virtually the entire bombing force in the theater (over 120 heavy bombers), and were designed to overwhelm DRV defenses.<sup>153</sup> These missions also focused on the destruction of enemy air defenses, a trend that persisted on for the duration of the campaign.<sup>154</sup> By the tenth night, there was a noticeable decline in defensive action by the DVR, few undamaged targets remained, and the major urban areas of North Vietnam were much more vulnerable to attack. After

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*Commander, Military Assistance Command, Vietnam (Vogt), December 14, 1972, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1972).*

<sup>149</sup> James R. McCarthy and George B. Allison, *Linebacker II: A View from the Rock*. Maxwell Air Force Base, AL: Airpower Research Institute, 1979), 42-89.

<sup>150</sup> Marshall L. Michel III, *The Eleven Days of Christmas: America's Last Vietnam Battle* (New York, NY: Encounter Books, 2002) Days, 172.

<sup>151</sup> Michel, *The Eleven Days of Christmas*, 179.

<sup>152</sup> Ibid., 181.

<sup>153</sup> Ibid., 189.

<sup>154</sup> Ibid., 210.

the eleventh night of the operation, bombing north of the 20th parallel ceased, and the United States declared its intention to reopen negotiations.<sup>155</sup>

Linebacker I intended to take away North Vietnam's ability to threaten the south with conventional military forces. Linebacker II intended to influence the psyche of the North Vietnamese by exposing them to a magnitude of force that they had not experienced to that date, and compel them to negotiate. The operational planning in both cases understood the desired strategic objectives, and made effective use of the means available to meet those goals.

Air power represented the primary means of compelling the North Vietnamese to negotiate. These operations unveiled two significant capabilities that had not been seen to that point in the war. First, during Linebacker I, precision guided munitions made their first large-scale battlefield debut. Second, during Linebacker II, the B-52, the United States' irreplaceable nuclear-capable bomber, with its unmatched payload capability, executed mission in large numbers over well-defended territory as a show of force and resolve by the US government.

In the immediate aftermath of the North Vietnamese invasion, the United States quickly routed combat aircraft to Southeast Asia to boost airpower that had been drawing down its numbers along with the rest of the US forces in Vietnam. Between April and May 1972, an additional 200 tactical aircraft arrived in theater.<sup>156</sup> The crisis in South Vietnam pulled away B-52s from their strategic nuclear deterrence mission and soon there were over 200 B-52s with about 300 crews, capable of a continuous generation rate of 105 sorties per day and the ability to surge to higher number for a limited time.<sup>157</sup> By the end of May, there were almost 400 F-4s and 210 B-52s in theater able to support operations in Vietnam.<sup>158</sup>

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<sup>155</sup> Michel, *The Eleven Days of Christmas*, 217.

<sup>156</sup> Marshall L. Michel III, *Clashes: Air Combat Over North Vietnam 1965-1972*. (Annapolis, MD: Naval Institute Press, 1997), 200.

<sup>157</sup> Michel, *The Eleven Days of Christmas*, 27.

<sup>158</sup> Michel, *Clashes*, 200.

Extensive use of precision guided munitions, particularly a gimbaled laser designator system called Pave Knife, saw use for the first time in North Vietnam during Linebacker I. The gimbaled laser designator allowed aircraft to designate their own targets, drop their ordinance, and continue to designate for following (non-Pave Knife equipped) aircraft while still performing an escape maneuver.<sup>159</sup> The paradigm-altering accuracy of the laser-guide bombs allowed targets that had been heretofore restricted due to collateral damage concerns to be effectively engaged. The increased accuracy drove a change in rules of engagement, and drastically changed the targeting process in North Vietnam during 1972.<sup>160</sup> The Pave Knife equipped aircraft were so effective, and the number of Pave Knife systems so limited, that the Air Force went to great lengths to protect those assets. Twelve strike aircraft generally had forty-eight enabling aircraft in support, which obviously drove large package sizes and decreased the number of missions that the United States could conduct on any given day.<sup>161</sup> However, despite the limitations inherent with the new technology, by May, the invasion had been halted, and precision munitions were used to systematically destroy bridges, rails, roads, and petroleum facilities that had previously been off limits.<sup>162</sup> In total, Linebacker I delivered 155,584 tons of munitions into North Vietnam, causing more damage than the entire Rolling Thunder campaign, which had lasted years and expended four times the bombs. Airpower reduced overland logistical input to North Vietnam from 160,000 tons per month to 30,000 tons per month, and seaborne inputs plummeted from 250,000 tons per month to almost zero.<sup>163</sup>

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<sup>159</sup> Michel, *Clashes*, 206.

<sup>160</sup> Ibid., 207.

<sup>161</sup> Ibid., 219.

<sup>162</sup> Tilford, *Crosswinds*, 151.

<sup>163</sup> Clodfelter, *The Limits of Airpower*, 167.



The use of large formations of B-52s, especially during the Linebacker II strikes, caused both a physical and psychological impact. The first three nights of bombing during Linebacker II were very near a disaster for the United States. On the first night of strikes, SA-2 surface to air missile (SAM) fire and unimaginative B-52 tactics led to the destruction of three of the B-52s, with two heavily damaged.<sup>164</sup> The second night saw one B-52 destroyed and, on the third night, using the same rote tactics, six B-52s fell to the DRV's missiles.<sup>165</sup> A change in tactics and persistence on the part of the Nixon administration eventually permitted the huge number of B-52s in theater to turn the tide over Hanoi. As the North Vietnamese expended their supply of missiles, the mined ports and the destruction of missile assembly facilities eventually exhausted the DRV's SAM supply. On day ten of the campaign, one B-52 crewmember commented, "There were no missiles, there were no MiGs, there was no AAA [antiaircraft artillery] - there was no threat. It was easy pickings."<sup>166</sup> During the course of Linebacker II, B-52s alone dropped 15,000 tons of bombs, reducing DRV strategic oil reserves by twenty-five percent and damaging or destroying over 1600 designated military or infrastructure targets.<sup>167</sup> Fighter/attack aircraft contributed an additional 5,000 tons of ordinance, providing much needed support to the B-52s and helping reduce DRV electrical generation capability from 115,000 kilowatts to just 29,000 kilowatts, directly effecting the majority of the population in North Vietnam.<sup>168</sup> The B-52 was not invulnerable, but proved decisive because of its ability to destroy on a scale far greater than the North Vietnamese could tolerate.

The Easter Offensive placed the Nixon administration in a tough spot. Without airpower, Nixon would have to commit limited US ground forces or essentially abandon the RVN to fend for

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<sup>164</sup> Michel, *The Eleven Days of Christmas*, 124.

<sup>165</sup> Ibid., 166.

<sup>166</sup> Clodfelter, *The Limits of Airpower*, 189.

<sup>167</sup> James R. McCarthy and George B. Allison, *Linebacker II: A View from the Rock*. Maxwell Air Force Base, AL: Airpower Research Institute, 1979), 171.

<sup>168</sup> Clodfelter, *The Limits of Airpower*, 194.

itself.<sup>169</sup> Similarly, when peace negotiations stalled in late 1972, there was little recourse for the United States outside of military action. In addition, reduced troop numbers demanded that any military action would be accomplished largely by air power. The risk to aircrew over these two operations was significant. North Vietnamese air defenses were powerful and effective, and the loss rate of B-52s over Hanoi exceeded estimates.

## Analysis

### Strategic Outcomes - Japan

The effects of the strategic bombing campaign on the Japanese government's decision to accept the terms of the Potsdam Declaration is clear from two perspectives. The damage to Japan's military and civilian morale from the bombing pushed the Japanese into an untenable situation. The use of the two atomic bombs provided an impetus for Japanese policymakers to overcome the die-hard attitude of senior military leaders, and allowed Japan to accept surrender with some manner of honor intact.

Japanese confidence in their ability to successfully continue the war began a precipitous decline at the beginning of the bombing campaign. In December 1944, ninety percent of the Japanese still thought they would win the war. By March, that number fell to seventy percent, and in June it was only fifty-four percent. Just prior to surrender, only thirty-two percent of Japanese thought the war could be salvaged. This decrease in morale is attributed to a loss of confidence in the state's ability to both wage war and protect its citizens.<sup>170</sup>

In a series of interrogations conducted after the war, various Japanese policymakers pointed towards the B-29 campaign as the decisive factor in the Allied victory. Admiral Asami Nayano, Chief of the Naval Staff and Supreme Naval Advisor to the Emperor, stated, "If I were to give you

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<sup>169</sup> Clodfelter, *The Limits of Airpower*, 156.

<sup>170</sup> Craven, ed., *The Army Air Forces in World War II*, 755.

one factor as the leading one that led to your victory, I would give you the Air Force.”<sup>171</sup> Prince Fumimaro Konoye also singled out the “prolonged bombing by the B-29s” as the factor driving Japan’s ultimate determination to seek peace.<sup>172</sup>

Considering the 6 August atomic attack, the Japanese accelerated their efforts to achieve peace on terms more suitable than those delineated in the Potsdam Declaration. Two days after the Hiroshima bombing, the Soviets granted Japanese Ambassador Sato a meeting with their Minister of Foreign Affairs, Vyacheslav Molotov, in which he hoped to discuss terms of surrender to be forwarded to the Allied powers at war with Japan. Instead, Molotov informed Sato that the Soviets would be terminating the non-aggression pact with Japan and declaring a state of war on 9 August.<sup>173</sup> The following morning, Emperor Hirohito expressed his wish that Premier Suzuki assemble the Supreme Council and his cabinet at once.<sup>174</sup> The ensuing meeting was still bitterly divided between the Suzuki-Togo faction that sought peace and prepared to accept the terms of the Potsdam conference, and the continued desire to wage war by the senior military members present.<sup>175</sup> During the debate, messengers brought news of the attack on Nagasaki to the council, along with the report from a captured American airman implying that Tokyo would be struck with an atomic bomb on 13 August.<sup>176</sup> After a series of meetings and debates that lasted the entire day, the Emperor clearly stated that it was his desire for the terms of the Potsdam Declaration to be

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<sup>171</sup> His sentiments were echoed by Premier Suzuki: “It seemed to me unavoidable that in the long run Japan would be almost destroyed by air attack so that merely on the basis of the B-29’s alone I was convinced that Japan should sue for peace...I myself, on the basis of the B-29 raids, felt that the cause was hopeless.” For more, see Hansell, *The Strategic Air War*, 257.

<sup>172</sup> Hansell, *The Strategic Air War*, 257.

<sup>173</sup> Robert J.C. Butow, *Japan’s Decision to Surrender* (Stanford, CA: Stanford University Press, 1954), 154.

<sup>174</sup> *Ibid.*, 159.

<sup>175</sup> Butow, *Japan’s Decision to Surrender*, 162.

<sup>176</sup> *Ibid.*, 160.

accepted as soon as possible. With his intentions known, the council reached consensus, and it made the decision to end the war by accepting Allied terms.<sup>177</sup>

Many factors influenced the Japanese decision to surrender. The war was obviously lost, and the Allies were inflicting great damage on Japan and her people. The strategic bombing campaign set the conditions for surrender, and the atomic bombs pushed the Japanese government over the edge. The power of the bombs allowed the military leaders of Japan to concede that any army could not possibly face such a weapon and expect to prevail, breaking the Japanese government's impasse and providing an acceptable justification for accepting the Potsdam terms.<sup>178</sup>

## Strategic Outcomes - Korea

Ultimately, the armistice talks did reach a conclusion and the document was signed, largely bringing active hostilities on the Korean peninsula to a halt. Air power played a contributing role to gaining the strategic objective of forcing an armistice. Also, in the closing moments of the war, airpower dealt a severe blow to the North Korean's ability to present an air order of battle, placing the United States and its allies in a position of relative advantage during the latter half of the 1950s.

Due to the closed nature of Soviet, Chinese, and North Korean governments in 1953, it is unclear why the Chinese and North Korean delegation finally agreed to an armistice. Eisenhower later stated his belief that the threat of an expanded war, aided by atomic attacks, had been the decisive factor in breaking the negotiation stalemate.<sup>179</sup> General Mark W. Clark believed negotiations succeeded, "only because the military pressure on them was so great that they had to yield..." The FEAF commander, General Otto Weyland, was even less nuanced when he stated, "We are pretty sure now that the Communists wanted peace, not because of the two-year stalemate

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<sup>177</sup> Butow, *Japan's Decision to Surrender*, 176.

<sup>178</sup> United States Strategic Bombing Survey Summary Report, *The Effects of Atomic Bombs on Hiroshima and Nagasaki* (Washington, DC: United States Government Printing Office, 1946), 23.

<sup>179</sup> Thompson and Nalty, *Within Limits*, 56.

on the ground, but to get airpower off their back.”<sup>180</sup> Likely, it was a combination of these factors, along with others, that finally led to the breakthrough at Panmunjom.

The effects of the late effort to prevent North Koreans from importing aircraft before the armistice went into effect is also hard to judge. It was later confirmed that the Communists had been able to move around 200 aircraft into North Korea during lulls in the attacks, and these aircraft had been dispersed and concealed to prevent their subsequent destruction on the ground.<sup>181</sup> Given the close ties that North Korea maintained with China, and the fact that Chinese forces remained in the country until 1958, there was not a pressing need for North Korea to rapidly rebuild its air force.<sup>182</sup> Similarly, the North Koreans needed to rely on their Communist allies to help provide for their defense in the years following the armistice as North Korea focused most of its energy and capital on rebuilding destroyed industrial infrastructure.<sup>183</sup> Because of the reclusive nature of the regime and the United States’ focus on Europe, there is little data available to detail the North Korean air order of battle in the mid-1950s. However, had the cease fire been broken in the years following the armistice, it can reasonably be assumed that United States forces would have maintained some material advantage over North Korean air forces.

## Strategic Outcomes - Vietnam

The use of airpower in the closing stages of the Vietnam conflict intended to coerce the North Vietnamese into negotiations while simultaneously creating a diplomatic environment that placed the United States in a position of relative advantage. Linebacker I placed DRV military forces in a position where a negotiated settlement was much preferable to continued fighting and

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<sup>180</sup> Futrell, *The United States Air Force in Korea*, 687.

<sup>181</sup> Ibid., 684.

<sup>182</sup> Ralph N. Clough, *Embattled Korea: The Rivalry for International Support* (Boulder, CO: Westview Press, 1987), 103.

<sup>183</sup> Tai Sung An, *North Korea: A Political Handbook* (Wilmington, DE: Scholarly Resources Inc., 1983), 33.

the resulting losses.<sup>184</sup> Linebacker II forced negotiations that almost immediately produced results described by Kissinger as “a major breakthrough.”<sup>185</sup> Both Linebacker operations were successful applications of military power to help the United States achieve military and political aims.

In a series of negotiations beginning on 19 July 1972, Kissinger described the DRV delegation as displaying behaviors that “are compatible with serious negotiations.”<sup>186</sup> By the first of August, the North Vietnamese had agreed that a peace deal would be signed *before* American forces withdrew from Vietnam, which had been a major point of contention up to that time. In the same session, on a point very close to the Nixon administration and the country as a whole, the DRV agreed in principle to release all prisoners within a month of signing a peace settlement.<sup>187</sup> These concessions were indicative of the tenor of negotiations during the summer and early fall of 1972. North Vietnamese Secretariat member Pham Hung issued guidance in mid-September to his communist cadre that it was critically important to “force” Nixon to settle the war before the United States elections, an indication of the pressure being applied to the DRV by Linebacker I, and the fear in Hanoi that, if reelected, Nixon would become even more aggressive in his policy towards Vietnam.<sup>188</sup> These factors were amplified by the growing détente between the United States and the

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<sup>184</sup> Clodfelter, *The Limits of Airpower*, 170.

<sup>185</sup> Office of the Historian, Department of State, *Document 256: Message from the President’s Assistant for National Security Affairs (Kissinger) to President Nixon, January 9, 1973*, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1972).

<sup>186</sup> Office of the Historian, Department of State, *Document 211: Memorandum from the President’s Assistant for National Security Affairs (Kissinger) to President Nixon, July 20, 1972*, Foreign Relations of the United States, 1969–1976, Volume VIII, Vietnam, January–October 1972 (Washington, DC, 1972).

<sup>187</sup> Office of the Historian, Department of State, *Document 224: Conversation Between President Nixon and the President’s Assistant for National Security Affairs (Kissinger), August 2, 1972*, Foreign Relations of the United States, 1969–1976, Volume VIII, Vietnam, January–October 1972 (Washington, DC, 1972).

<sup>188</sup> Clodfelter, *The Limits of Airpower*, 170.

Soviet and Chinese allies of North Vietnam.<sup>189</sup> A breakthrough occurred on 11-12 October, with the US and DRV agreeing in principle on all major points of the negotiations.<sup>190</sup> Linebacker I shaped the negotiations that would almost certainly have ended the war if not for South Vietnamese intransigence.

The collapse of negotiations in October 1972 led to stalemate and the decision to conduct Linebacker II. The North Vietnamese indicated their willingness to re-enter talks on December 26, about half way through the bombing campaign.<sup>191</sup> In discussions with President Nixon, Kissinger described this offer to restart talks on 8 January 1973 as “a tremendous cave” on the part of the DRV. Nixon was not willing to take all the pressure off the North Vietnamese, but he did order bombing north of the 20th parallel to cease pending the outcome of the talks.<sup>192</sup> Kissinger was particularly optimistic for success. In his back-channel communications with North Vietnam, the Vietnamese indicated that they would meet to discuss peace terms in the first meeting, and *discuss a schedule for the final signing of those terms in a second meeting*. Kissinger described the North Vietnamese as “practically on their knees” and acknowledged that had bombing continued in “another week or two, we would have had unshirted hell in this country.” Nixon praised the effect of airpower on the political situation, acknowledging the primacy of the B-52 effort during the typically poor winter weather conditions of Vietnam saying, “because, goddamnit, there’s nothing

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<sup>189</sup> Clodfelter, *The Limits of Airpower*, 169.

<sup>190</sup> Office of the Historian, Department of State, *Document 9*.

<sup>191</sup> Clodfelter, *The Limits of Airpower*, 197.

<sup>192</sup> Office of the Historian, Department of State, *Document 225: Transcript of a Telephone Conversation Between President Nixon and the President’s Assistant for National Security Affairs (Kissinger), December 26, 1972*, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1972).

else that can fly at this time of year.”<sup>193</sup> This series of peace talks were productive, and nineteen days after they began, the Paris Peace Accords were signed.<sup>194</sup>

## Conclusion

The United States relied on airpower to enable diplomatic ends during the terminal stages of these three conflicts. The decisiveness of these operations varies per the operational environment and the nature of negotiations that the United States was willing to participate in. In no way was airpower solely responsible for the conclusion of these long and costly wars, but in each case, it helped conclude the wars in a manner that served United States interests at the time.

The study of Japan in 1945 provides a brutal example of airpower’s ability to coerce. The bombing campaign drastically escalated pressure on the Japanese government and people, even as American ground operations slowed in anticipation of an invasion of Kyushu. Japanese policy makers clearly understood that airpower posed an existential threat to their nation. The United States used both avenues of coercion, threatening civilian populations and destroying the enemy military’s ability to achieve political objectives, to force a Japanese surrender. The operational concepts and means employed reflected the nature of the conflict, combining high enmity and a methodical, scientific application of destructive power. It is difficult to imagine a future conflict that would have these same levels of destruction and not cross the apocalyptic nuclear threshold, but the underlying principles of coercion remain relevant.

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<sup>193</sup> Office of the Historian, Department of State, *Document 234: Telephone Conversation Between President Nixon and the President’s Assistant for National Security Affairs (Kissinger), December 28, 1972*, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1972).

<sup>194</sup> Office of the Historian, Department of State, *Document 341: Telegram from the U.S. Delegation to the Paris Peace Talks to the Department of State, January 27, 1973*, Foreign Relations of the United States, 1969–1976, Volume IX, Vietnam, October 1972–January 1973 (Washington, DC, 1973).



Korea offers the least-definitive evidence of decisive effects of airpower on negotiations. An adaptive, resilient, and well-supplied enemy limited airpower effects during the last year of the war while negotiations moved at a snail's pace. However, airpower remained the force of choice for UN commanders while ground forces largely maintained strong defensive positions. Aircraft maintained the most aggressive operational tempo of any UN forces and demonstrated the resolve of United States while allowing the ground forces to assume less risk. Airpower provided a significant portion of the fires effects that proved communist ground offensives were likely to fail in the face of immense UN firepower. This form of coercion negated the North Korean and Chinese ability to use their military to achieve their political objectives, and likely played the leading role in the eventual signing of an armistice.

The Linebacker operations in Vietnam represented a refinement of the concepts demonstrated in World War II and Korea. Linebacker I effectively destroyed North Vietnam's ability to use its conventional military forces to achieve their political goal of a forced unification with South Vietnam. A lack of ground forces capable of threatening the DRV required Nixon to approach policy aims solely with airpower. The widespread use of precision bombing technology magnified the destructive effects of individual aircraft to a level unseen in previous conflicts. Linebacker II consisted of re-targeting facilities and structures that had been destroyed in Linebacker I, proving that the United States had the capability to destroy Vietnamese war-making capacity more quickly than the DRV could rebuild it. Immediately following the Linebacker operations, North Vietnam had little chance of mounting a successful conventional military invasion of the RVN. Additionally, the destruction of the great portion of air defenses in the North Vietnamese heartland left the entire country, including the civilian population, open to attack. This dual-channel coercion once again proved effective in settling negotiations agreeable to the United States.

These three case studies represent only a small portion of conflicts in which the US has used airpower to pursue strategic, operational, or tactical objectives. These case studies focus on conflicts in a limited portion of the world, and all the antagonists had a distinctly Eastern approach to negotiations and conflict resolution. However, there is common evidence that may prove useful in future conflicts. Airpower cannot take and hold ground; it is a destructive force, and should be used as such. Airpower can provide acceptable operational tempo over long periods of time at acceptable risk. Airpower provides effective coercion at the strategic level. Clear and achievable strategic aims, particularly in the near to mid-term, allow airpower operations to maximize coercive effects. Allowing that the threatening or targeting of civilian populations is undesirable, except in the most extreme cases, much of airpower's coercive potential should be focused on the destruction of an enemy's ability to utilize its military to achieve political goals. This may entail the physical destruction of national command and control apparatus, military equipment, or war-related industries. The operational concept should account for the operational environment, the strategic or operational objectives, and the means available to achieve these objectives.

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