

FLYING WITH WINGS OF DETERMINATION:
BRITISH, SOVIET AND AMERICAN WOMEN PILOTS DURING WORLD WAR II

by

John Dale Nall

A Thesis Submitted to the Faculty of
The Dorothy F. Schmidt College of Arts and Letters
In Partial Fulfillment of the Requirements for the Degree of
Master of Arts

Florida Atlantic University

Boca Raton, Florida

May 2023

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This thesis was prepared under the direction of the candidate's thesis advisor, Dr. Barbara Ganson, Department of History, and has been approved by all members of the supervisory committee. It was submitted to the faculty of the Dorothy F. Schmidt College of Arts and Letters and was accepted in partial fulfillment of the requirements for the degree of Master of Arts.

SUPERVISORY COMMITTEE:

Barbara A. Ganson, Ph.D.

Barbara A. Ganson, Ph.D. (Mar 28, 2023 18:05 EDT)

Barbara Ganson, Ph.D.

Thesis Advisor

Patricia Kollander, Ph.D.

Patricia Kollander, Ph.D. (Mar 29, 2023 09:12 EDT)

Patricia Kollander, Ph.D.

Douglas T. McGetchin

Douglas T. McGetchin (Apr 4, 2023 09:55 EDT)

Douglas McGetchin, Ph.D.

Douglas Kanter

Douglas Kanter (Apr 4, 2023 10:40 EDT)

Douglas Kanter, Ph.D.

Chair, Department of History



Michael J. Horswell, Ph.D.

Dean, Dorothy F. Schmidt College of Arts
and Letters

William David Kalies

William D. Kalies, Ph.D.

Interim Dean, Graduate College

April 5, 2023

Date

ACKNOWLEDGEMENTS

I would not be where I am today without the support of my family and friends over the time that I have written this thesis, but special thanks are reserved for my mother who has always been by my side and encouraged me to keep writing no matter what challenges I faced. I would also like to thank the members of my thesis committee who were gracious enough to mentor me throughout the writing process: Dr. Patricia Kollander, Dr. Douglas McGetchin, and the chair of my committee, Dr. Barbara Ganson. I would also like to thank the entire History Department in the Dorothy F. Schmidt College of Arts and Letters, as well as many of my classmates and colleagues, who provided numerous resources and recommendations to me when I started this research. Each of these professors and friends have helped me when I needed their guidance the most and I hope that someday I will be able to offer a similar level of wisdom to others in my future career as a history professor. Thank you all so much for everything.

ABSTRACT

Author: John Dale Nall

Title: Flying with Wings of Determination: British, Soviet and American Women Pilots during World War II

Thesis Advisor: Dr. Barbara Ganson

Institution: Florida Atlantic University

Degree: Master of Arts

Year: 2023

This thesis is an international comparative analysis on the women pilots of Britain's Air Transport Auxiliary, the Soviet Union's Aviation Group 122, and the United States' Women's Auxiliary Air Force, Women's Flying Training Detachment, and the Women Airforce Service Pilots during World War II. Women pilots in these groups were motivated by three different factors in each country to aid the war effort and that determination was a common thread among these groups that drove them to serve their countries' militaries. What made the pilots' efforts stand out was that they offered the Allies an advantage over the Axis Powers in terms of utilizing an additional workforce. Unfortunately, these women are widely unrecognized for this advantage and are brushed aside. It is important to recognize the significance of how these women impacted the Allies socially and militarily, and this work aims to expand the discussion in World War II studies.

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INTRODUCTION:

Amelia Earhart, one of the most popular American women pilots of the 20th century, was invited to speak at a public radio broadcast about a woman's place in the scientific world in 1935. Earhart spoke about many of the recent technological advancements of the time in this broadcast and how they opened several avenues for the modern woman to pursue new opportunities rather than fulfill traditional feminine roles.¹ One of the avenues that she specifically addressed in this radio broadcast was about the field of aviation:

Among all the marvels of modern invention, that with which I am most concerned, is of course, air transportation. Flying is perhaps the most dramatic of recent scientific attainment. In the brief span of thirty-odd years, the world has seen an inventor's dream, first materialized by the Wright Brothers at Kitty Hawk, become an everyday actuality. Perhaps I'm prejudiced, but to me it seems that no other phase of modern progress contrives to maintain such a brimming measure of romance and beauty, coupled with utility as does aviation.²

Earhart's speech from this broadcast became one of the main inspirations for hundreds of women to participate in the new world of aviation. The inspiration these women felt helped to prepare them for a difficult task they were later called to face by the early 1940s: flying military aircraft in World War II.

¹ Amelia Earhart, "A Woman's Place in Science," Speakers Directory – Amelia Earhart, Iowa State University: Archives of Women's Political Communication, last accessed October 30, 2022, <https://awpc.cattcenter.iastate.edu/2017/03/21/a-womans-place-in-science-1935/>.

² Library of Congress, "Speech by Amelia Earhart," last accessed October 30, 2022, <https://www.loc.gov/item/afccal000004/>; Library of Congress, "Speech by Amelia Earhart (Transcript)," last accessed October 30, 2022, <https://www.loc.gov/item/afccal000410/>.

Shortly after the outset of the war in Europe in September 1939, women pilots from countries like England, the Soviet Union, the United States of America, Canada, Australia, South Africa, Chile, and Poland pursued various avenues to aid the war effort through the field of aviation. These women knew they could use their experience in aviation to pilot a variety of warplanes as support for their countries' civil and military efforts while testing their abilities in new experimental aircraft.³ In terms of what missions these women carried out, many primarily flew missions to deliver warplanes across their countries to various military airfields or served as air taxis for military officials. Britain and the United States incorporated women pilots with civilian organizations that worked for the military, but they never operated as part of the military nor as fighter pilots. However, the Soviet Union was the only Allied Power exempt from this trend because the Soviet government allowed women to fly combat missions with full military status after Nazi Germany invaded Russia. Despite their different mission prerogatives, these women made impressive contributions to the war effort that allowed their countries to succeed strategically on the frontlines.

This thesis intends to utilize an international comparative perspective of Allied women aviators and their contributions to the war effort in Britain, the Soviet Union, and the United States during World War II as it examines key elements of gender, race, and social structure that were present in women's aviation. Various motivators influenced Allied women to volunteer and serve as civilian and military pilots which depended upon their social status, education, background, and relationships. For the western Allies,

³ Lois K. Merry, *Women Military Pilots of World War II: A History with Biographies of American, British, Russian and Germany Aviators* (North Carolina: McFarland & Company, Inc., 2011), 7-8; Amy Goodpaster Strebe. *Flying for Her Country: The American and Soviet Women Military Pilots of World War II* (Westport: Praeger Security International, 2007), xi, 1-3.

research has shown that American and British governments placed many limitations on the women who worked in civilian aviation groups such as the Air Transport Auxiliary (ATA), the Women's Auxiliary Ferrying Squadron (WAFS), and the Women Airforce Service Pilots (WASP) which prevented them from fulfilling military roles. Meanwhile on the eastern front, the Soviet Union's Aviation Group 122 and their militarization of women pilots showed how they greatly contrasted the other Allied governments' objectives towards implementing women in war because of their gender equality policies. Unlike previous works, this thesis examines the motivations of women pilots who flew on behalf of the Allied Forces despite the limitations and challenges they faced because of their gender.

The collective efforts and determination of women pilots in Allied countries established a significant leap for women's roles in the male dominated sphere of aviation. Each of these groups were essentially proposed by wealthy or famous women pilots who had strong connections with politicians or military officials due to their social standing. These famous pilots included Pauline Gower in Britain, Marina Raskova in the Soviet Union, and Nancy Love, as well as Jaqueline Cochran, in the United States. It stands to reason that these aviation units would not have formed as soon as they had without the connections made by these women who led their groups. However, another important aspect to stress is that the loss of connections would not have completely erased the formation of the units either. The tenacity of certain airwomen, specifically Soviet airwomen, to fly war planes was too influential for politicians and the military to ignore during a massive global conflict. For example, the Soviet Union had one incident where a couple of women snuck onto an airfield and stole two warplanes to fight against the

German invasion.⁴ This, and a few other similar events, reveals that the mobilization of women as civilian and military pilots for the war effort was only a matter of time.

These moments of persistence also served to highlight the difference between eastern airwomen and western airwomen in terms of military resolve. Determination, as it was previously demonstrated, served as the keystone for the integration of Soviet women into the Red Army as military pilots. This is not to say that British and American airwomen were not determined enough to serve in their country's militaries, but they certainly were not determined enough to serve on the same level as Soviet women. A part of this was ascribed to gender roles concerning a woman's place in warfare, while other reasons related to the strength of their military's manpower or the steadfast beliefs of officers in charge of aviation roles. While British and American women were limited to auxiliary roles as pilots, these women proudly served their countries and faced their fair share of danger like any other Soviet airwoman.

The issues surrounding women pilots over 20th century gender roles does also pose the question: to what degree did the large influx of women who joined military aviation express a feminist cause for their work? To define the term for this topic, feminism is regarded as the active and conscious pursuit of social and legal gendered equality for women through activism. There were relatively few women pilots who pushed for a movement during the war; rather, it is likely that most women were focused instead on performing their roles efficiently since the mobilization of women pilots was to end the war sooner. This sentiment was also emphasized by the women leaders of these pilot groups during and after the war. Some of the leaders were even against the

⁴ Yevghenia Andreyevna Zhigulenko, "The Fronts," *Remembering War: A U.S.-Soviet Dialogue*, eds. Helene Keyssar and Vladimir Pozner (New York: Oxford University Press, 1990), 39-40.

idea of feminism and actively dissuaded the suggestions that their pilot groups were trying to push a feminist movement onto society. Nancy Love and Jacqueline Cochran were two leaders who mostly held this stance due to the controversial nature of their groups in American society.

Simply put, most women pilots in the 1940s did not express an ulterior motive to serve as civilian and military pilots. Many of the women, specifically in the Soviet Union and the U.S., made statements that expressed straightforward reasoning behind their actions that culminated in an overarching urge to return to their pre-war lives.⁵ As such, the formation of these women pilot groups and their roles in flying warplanes, whether as civilians or military pilots, did not originate from any feminist goal to bring women into the military. The Allied women's reasoning itself showed the different motivations that created their groups and empowered them to perform their wartime roles.

Motivation is an issue within previous works on World War II women pilots when it comes to an analysis on their personal lives. The issue here is that scholars in recent works have not underlined the significance of motivation in the personal lives and professional careers of women while they flew as civilian and military pilots. Instead, scholars have taken a broader approach to their works by analyzing the statistics of the women pilot groups, explaining the effectiveness of their groups in the war, or by emphasizing the gendered boundaries these women pilots broke in official military and

⁵ Ibid., 39-40, 43, 45; Yevgeniya Zapolnova-Ageyeva, "125th Guards Bomber Regiment," in *A Dance with Death: Soviet Airwomen in World War II*, ed. Anne Noggle (College Station: Texas A&M University Press, 1994), 112; Ann Darr, "The Women Who Flew - but Kept Silent: They did Endless 'Aerial Dishwashery' but were Denied Even the Name 'Veteran!'" *New York Times*, May 7, 1995; Alexandra Makunina, "586th Fighter Regiment," in *A Dance with Death*, ed. Anne Noggle, 166; Serafima Amosova-Taranenko, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 47; Elizabeth R. Valentine, "No. 1 Woman Flier: Jaqueline Cochran, who flew a bomber to Britain, advises American women to follow a British example," *New York Times*, July 13, 1941; Yevghenia Andreyevna Zhigulenko, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 56.

aviation history. What many of these works lack is an understanding and proper analysis as to how specific motivators empowered women pilots during the war. It is important to recognize the psychological incentives these women shared as pilots and how it separated them from other female combatants and civilian workers.

It is the hope that this thesis will add a notable contribution to the international perspective of studying women pilots in military history to disprove the infamous belief that women were invisible participants in World War II. The goal is to change this trend in the historiography by highlighting the idea that patriotism, vengeance, and self-reliance were three types of determination to serve as prominent motivators for Allied women pilots in each of their countries, in that order for Britain, the Soviet Union, and the U.S. Gower, Raskova, Love, and Cochran did not create their own groups with these resolutions in mind, but there is no denying that patriotism, vengeance, and self-reliance rose as prominent motivators for many of the women pilots. These motivators became evident within the specific individual groups as many factors of the war continued to directly influence the women's reasoning to fly as civilian and military pilots. There were clearly many other reasons behind the women pilots' actions and some changed over time, but these three factors were stronger and more prevalent overall.

For Britain, patriotism was a strong motivation for women to join the ATA when the Battle of Britain commenced in 1940. British women felt it was their patriotic duty to aid the war effort by working as nurses, operators, or as anti-aircraft personnel, ferrying military aircraft was no different in contributing towards the war effort. Patriotism also played a large role for women in the Soviet Union, but the main driving force for these airwomen was the anger they felt towards the Germans for invading their homeland,

murdering their neighbors, and disrupting their lives. Vengeance is perhaps an exaggerated term to describe this motivation, but numerous accounts from Soviet women recalled the anger and pain they felt from tragedies committed by the German Luftwaffe. Lastly, self-reliance was a strong resolution for American women pilots in the WAFS and WASP programs as they were left to support themselves against significant backlash over their mission. Women pilots in the U.S. were perhaps the most controversial out of the three Allied countries because of American gender norms, but their efforts to persevere sustained their operations until December 1944. Overall, these three factors were crucial to each Allied aviation group and they were the primary source of encouragement for many women pilots during the war.

With these arguments in mind, it is vital to review certain sources used in this research and their importance to the history of women pilots in World War II. For one, memoirs, letters, diaries, films, autobiographies, some interviews, and news articles are the main sources used to gather primary evidence on how determination encouraged women pilots to fly in the war. While some news outlets reported on these groups during the war, it was mostly the women pilots themselves who provided firsthand accounts about their daily work, motivations, and personal opinions of their roles. Another valuable source of primary information comes from a few archival websites run by World War II women pilot veterans who chronicled the groups they served. These websites are used to examine official records and statistics from three of the women pilot groups in Britain and the U.S.

Some of the most influential works that collect firsthand accounts are Svetlana Alexievich's *The Unwomanly Face of War: An Oral History of Women in World War II*;

Jacky Hyams' *The Female Few: Spitfire Heroines*; Helene Keyssar and Vladimir Pozner's *Remembering War: A U.S.-Soviet Dialogue*; and Anne Noggle's *A Dance with Death: Soviet Airwomen in World War II*. Noggle's collection is the most substantial of this list as she interviewed sixty-nine Soviet women pilots, each of whom provided an in-depth history of their service and experiences in the Great Patriotic War. Collections like these provide excellent excerpts, but autobiographies published by the women pilots themselves, or by their friends and family, reveals a deeper account of events that took place from different perspectives. Women pilots such as Jackie Moggridge, Nancy Miller Livingston Stratford, Betty Gillies, Dorothy Scott, and Anna Timofeyeva-Yegorova are only a few of the autobiographies that convey experiences of flying military aircraft during the war. Each of these accounts describe relatively unique perspectives in the grand scheme of each program as not a lot of women pilots had the same experience in their career.

Autobiographies from members of the groups are important to understand the history of common women pilots during World War II, but it is also important to take the leaders of the groups into consideration for a higher level of understanding.

Unfortunately, there are few works relating to the leaders that have been difficult to acquire, either because they were unavailable or they were never produced. For instance, Pauline Gower's autobiography, *Women with Wings*, is widely unavailable in an online and physical format in the U.S. Moreover, it is most likely irrelevant to this study since it was initially published in 1938, well before Gower formed the Women's Section in the ATA. Gower, as well as Marina Raskova, never got the chance to write postwar autobiographies as the former died after giving birth to twins in 1947 and the latter

perished in a fatal plane crash in 1943.⁶ Nancy Love never wrote an autobiography for the sole purpose of guarding her privacy and she refused to share any details of her time in the WAFS and WASP programs until she died of cancer in 1976. The only option to gain an insight on Love's views and beliefs during the war is to rely on Sarah Bryn Rickman's biography, *Nancy Love: WASP Pilot*, which is hailed as "the most complete biography of Love currently in existence."⁷

Jacqueline Cochran, however, was an entirely different matter in the scope of written autobiographies because of her boisterous personality. To date, Cochran was the only woman leader to write two postwar autobiographies, one version called *The Stars at Noon* (1954) and a posthumous version titled *Jacqueline Cochran: The Autobiography of the Greatest Woman Pilot in Aviation History* (1987). While these two works may be welcomed as primary material due to the scarce presence of autobiographies from the other women groups' leaders, there is a troubling factor tied to them. Jacqueline Cochran was a controversial figure in America and Britain during the interwar period and World War II, mainly because of how assertive she was in the field of aviation. This assertive behavior, while it was a double-edged sword, allowed Cochran to make strides for women pilot's rights in organizations like the ATA and it helped her to form the WASP program. There is no denying that Cochran made significant contributions in aviation, but the issue with her autobiographies is that she is an unreliable narrator considering she occasionally exaggerated her presence in the field.

Alongside this issue, reading Cochran's autobiographies at face value presents further complications after it was recently proven by Doris L. Rich in *Jackie Cochran*:

⁶ Merry, *Women Military Pilots of World War II*, 151, 153.

⁷ *Ibid.*, 154-155.

Pilot in the Fastest Lane that she established a fictional history about her family, education, and her own name. According to Cochran, she claimed in many interviews and biographies that she was an orphan who lived with an impoverished foster family throughout her early life with no clue as to who her real family was. However, Rich's biography identified that Cochran's claims of orphanhood were false; her foster family was her real family, but she refused to acknowledge them as such because of their impoverished status and her mother's abusive power over her. Rich further noted that Cochran's education was an ambiguous topic whenever she talked about it. She did her best to avoid the fact that her formal education was nothing more than two years of elementary education and she was illiterate for most of her life. This issue was once evident when Cochran claimed in the January 1938 edition of *U.S. Air Services* that she was a graduate nurse despite having no such degree to her name. These findings have made it evident that Cochran altered her past and embellished herself as a wealthy individual in American society once she began her aviation career.⁸ This issue of fabrication is not unusual in reading historical literature, but it means that Cochran's autobiographies must be approached with caution and needs a comparison with the other women pilots writings to glean the truth about her role in the ATA and WASP program.

Because autobiographies like Cochran's are narrow in scope and focus on specific experiences for evidence, secondary sources help to understand a wider context about the women leaders and the four women pilot groups. Secondary sources that take an international comparative approach to studying Allied women pilots provide special

⁸ Ibid., 145; Katherine Sharp Landdeck, *The Women with Silver Wings: The Inspiring True Story of the Women Airforce Service Pilots of World War II* (New York: Crown Publishing, 2021), 52-54; Doris L. Rich, *Jacqueline Cochran: Pilot in the Fastest Lane* (Gainesville: University Press of Florida, 2007), 2, 3, 7, 11-12, 14-15, 19, 50, 63, 77, 106-107, 111, 150, 164, 182, 186.

insight into understanding the individual women and organizations during the war.

Helena P. Schrader was the first historian to initiate this approach when she published an article with the *Journal of Navigation* in 2006, titled “Winged Auxiliaries: Women Pilots in the UK and US during World War Two.” Schrader’s work established a comparative analysis that was based on the differences between women pilots in the ATA and the WASP program. She argued that environmental, organizational, and leadership differences in the groups were the key reasons why the ATA succeeded and the WASP program failed as a pilot group. Schrader also relied on examining specific differences between the two groups through separate categories like the groups’ goals, their recruitment statistics, their training, duties, terms of service, and many more aspects that influenced the ATA and WASP.⁹ This type of international perspective within the Allies established a unique method of analyzing the specific qualities these women shared throughout the war in the historiography. However, Schrader was not the only one to contribute towards the international comparative perspective of observing women aviators during the war.

Amy Goodpaster Strebe was another historian who helped kickstart an interest in this approach a year later with her book, *Flying for Her Country: The American and Soviet Women Military Pilots of World War II*. Strebe argued that while American and Soviet airwomen did not break any new ground or instantly alter the course of aviation history with their presence, they were “the first female military pilots . . . [who] succeeded at setting a precedent for subsequent generations of women in aviation.”¹⁰ By

⁹ Helena P. Schrader, “Winged Auxiliaries: Women Pilots in the UK and US during World War Two,” in *The Journal of Navigation*, no. 59 (2006): 187, 189-192.

¹⁰ Strebe, *Flying for Her Country*, 83.

this argument, Strebe emphasized that it was their courage, professionalism, and determination that made the most out of the rare opportunity they were given in World War II.¹¹ Strebe's analysis on determination is one aspect that this thesis plans to explore further in order to emphasize its importance to the success of many women pilots in the Allied Powers.

Lastly, Lois K. Merry contributed one of the most important works in the historiography five years after Strebe, which has also inspired this thesis, with *Women Pilots of World War II: A History with Biographies of American, British, Russian and German Aviators*. In this international comparison, Merry argued that there were no books in aviation history that observed women pilots who flew military aircraft on a global scale during World War II, aside from Schrader's and Strebe's narrowly focused works. Another issue that Merry identified was that these pilots' prominence disappears with each year in the twenty-first century, so much so that women who are active participants in military aviation today might assume that they have made groundbreaking strides for women in the military.¹² Merry's work did indeed provide an international perspective of women aviators during the war, but the work mainly focused on Allied countries since they offered opportunities for women pilots unlike most of the Axis Powers. As such, there is merit to Merry's argument and so it requires further analysis on World War II era women pilots to effectively establish their presence in the history.

As opposed to this international perspective, most works in the historiography are centered either on the Allied women pilot groups individually, or on specific women pilots who participated in the war. Specifically, three works from the past twenty-two

¹¹ Ibid.

¹² Merry, *Women Military Pilots of World War II*, 2.

years have since come out that each offered a comprehensive and detailed examination on the four women pilot groups individually. These works were well received and considered by many critics to be definitive histories for each of these groups, and so they provide a valuable asset to this research. These works, in their chronological order, are Reina Pennington's *Wings, Women, & War: Soviet Airwomen in World War II Combat* (2001); Giles Whittell's *Spitfire Women of World War II* (2007); and Katherine Sharp Landdeck's *The Women with Silver Wings: The Inspiring True Story of the Women Airforce Service Pilots of World War II* (2021).

Pennington's *Wings, Women, & War* is a scholarly survey, the first according to the author, written about Soviet women pilots who served in Aviation Group 122 and mixed gender units during World War II. What drove Pennington to write this survey was the popular trend among military historians in the late 1990s to ignore the history of women as military combatants. One of the most common statements that Pennington disagrees with in this work was by the historian D'Ann Campbell who stated in the *Journal of Military History* that "women are the invisible combatants of World War II."¹³ The collapse of the Soviet Union and the opening of the Soviet military archives on World War II to the public presented the perfect opportunity for Pennington to disprove this trend. As such, Pennington collected numerous documents dating back to the war while she conducted interviews with many veterans and Soviet officials who oversaw Aviation Group 122. Aside from the argument against the concept of the "invisible combatants," Pennington also disputes the common assumptions among Western scholars that Soviet women pilot units were created for propaganda, feminist, or desperate

¹³ D'Ann Campbell, "Women in Combat: The World War II Experience in the United States, Great Britain, Germany, and the Soviet Union," in *The Journal of Military History*, 57 no. 2 (1993): 301.

motives.¹⁴ Pennington provides a complete history that explains the formation of Aviation Group 122, how they were officially recruited into the Soviet military, served as military pilots, and went beyond the assumptions about their creation and service.

Giles Whittell's *Spitfire Women of World War II* is another excellent secondary source that rejects the trend of ignoring women's contributions in military history by focusing on the western side of the world. Whittell's work, as another scholarly survey like Pennington's, examines the formation and short life of the Women's Section in the British ATA, a group that primarily served as a civilian auxiliary group to the Royal Air Force during World War II. Whereas Pennington set out her work to actively disprove the invisible combatant belief in military history with Soviet women, Whittell approached his work with the intent to spread awareness about British women pilots because they lacked acknowledgement in British history. What Whittell found interesting in his interviews with ATA women pilot veterans was that most of them described their service either as doing their part for Britain's war effort or contributing to the fight for freedom against fascism.¹⁵ In a sense, Whittell's work argues for the remembrance of British women pilots as active participants in a time of rampant war and misogynistic beliefs surrounding military aviation. Whittell was certainly not the only scholar to argue for the remembrance of women pilots who served in military auxiliary roles during the war either.

Katherine Sharp Landdeck's *The Women with Silver Wings: The Inspiring True Story of the Women Airforce Service Pilots of World War II* is the last of the three

¹⁴ Reina Pennington. *Wings, Women, & War: Soviet Airwomen in World War II Combat*. (Kansas: University Press of Kansas, 2001), 1-3.

¹⁵ Giles Whittell, *Spitfire Women of World War II* (London: Harper Perennial, 2007), 4, 305-307.

definitive histories within the historiography and it surveys the American WAFS and WASP aviation programs. As was mentioned beforehand, Landdeck, a pilot herself as well as a historian, wrote her own survey on these two groups to inform the public about American women who worked as auxiliary pilots for the U.S. military. This came from the fact that Landdeck met with many WAFS and WASP veterans throughout her academic career, but she was also inspired to provide a work that detailed the whole lifetime of the women.¹⁶ Landdeck explained how she felt it imperative that “their whole story, full of triumphs and reversals, be properly told” after she interviewed so many WASP veterans and became friends with a few others in the process.¹⁷ Sure enough, Landdeck’s work conveys an extensive history of both groups, with an emphasis on the WASP program, that traces their origins after the bombing of Pearl Harbor to their victory in gaining military veteran status in the 1970s.

Each of these surveys not only highlight women’s stories from Britain, the Soviet Union, and the United States, they take into consideration each of the women’s perspectives, the records that officiated their groups, the varied public opinions, and the postwar lives these women led that impacted their aviation careers. Unfortunately, there are relatively few works that compare the women pilots of World War II with the international lens. Only Merry’s *Women Military Pilots of World War II*, Strebe’s *Flying for Her Country*, and Schrader’s article, are the main works that take this approach.

What each of these countries showed during the interwar period was that aviation as a field was quickly expanding to unprecedented lengths in terms of technology and popularity. Moreover, the world recognized the value of airpower in the days leading up

¹⁶ Landdeck, *The Women with Silver Wings*, 335-337.

¹⁷ *Ibid.*, 337.

to World War II and many understood that the absence of this new extension of power could lead to a terrible defeat in geopolitical affairs. While there was never an issue regarding a shortage of pilots throughout the war, the Allies wanted to bolster the numbers of infantrymen due to the massive number of casualties that skyrocketed in the 1940s. By this point, women pilots who were social or economic elites understood that they possessed skills which made them overqualified for positions like nursing or wartime production. As a result, many of these women felt that their talents would be thrown away under such circumstances and gathered *en masse* to assist their countries in their own ways as pilots. Each of the four groups discussed in this thesis were valuable assets for the Allies and it is crucial to recognize the efforts of these women who are dangerously fading from the public knowledge about the last great war.

I: THE SPITFIRES FLY OVER WAR-TORN BRITAIN

(JANUARY 1940)

AIR TRANSPORT AUXILIARY

The British Air Transport Auxiliary (ATA) was not the first organization to provide an opportunity for women to pilot military grade airplanes, but it was the first to form within the western world during World War II. The ATA was first founded in September 1939 under the command of Gerard “Pop” d’Erlanger, director of British Airways. The goal of the organization was to “fly light civilian aircraft to carry dispatches, VIPs, wounded or vital supplies” under the assumption that a massive German bombing campaign in the first week of the war would cripple British communications.¹⁸ The unit’s roster was initially created by men who were ineligible to register for the Royal Air Force but still capable of flying an aerial transport.

Men of various backgrounds like wounded veterans from World War I, civil servants, intellectuals, bank managers, and artists were recruited into the civilian pool. Women were also hired as flight instructors by Britain’s Civil Air Guard and the ATA well before the war began, so their consideration for employment as full time auxiliary pilots within the organization was not unprecedented.¹⁹ Women were also favorably

¹⁸ Helena P. Schrader, “Winged Auxiliaries: Women Pilots in the UK and US during World War Two,” in *The Journal of Navigation*, no. 59 (2006): 187.

¹⁹ *Ibid.*, 188; Lois K. Merry, *Women Military Pilots of World War II: A History with Biographies of American, British, Russian and Germany Aviators* (North Carolina: McFarland & Company, Inc., 2011), 21; Giles Whittell, *Spitfire Women of World War II* (London: Harper Perennial, 2007), 11.

considered for employment as auxiliary pilots within the ATA thanks to the efforts of prominent record-breaking women pilots that advocated for women to pursue aviation as a career, and Pauline Gower was the most influential advocate of the time in Britain.

Pauline Gower was born into Britain's wealthy society as the daughter of Gillingham's Member of Parliament, Sir Robert Gower, and she was educated at distinguished boarding schools during her early life. Gower, however, was not interested in education and she was attracted to aviation at an early age. Gower later became a reputable figure in pre-war Britain after she graduated from the Phillips and Powis School of Flying as Britain's first female commercial pilot, and the world's third, in 1931.²⁰ Thereafter, Gower formed a joyriding and air-taxi service, called Air Trips, with her friend and business partner, Dorothy Spicer, and maintained the company during the Great Depression in 1931.²¹ While Gower might not have broken aviation records, her passion for flying made her a strong advocate for the inclusion of female ferry pilots in Britain's war effort.²² Her reputation grew as a popular lecturer on aviation and women's roles in the field while she was a Civil Air Defense Commissioner and an active member of a parliamentary committee dedicated to reviewing safety regulations for low-flying banner-pullers.²³

Misogynistic challenges to a woman's place in aviation motivated Gower to take a determined stance for women's rights in the field and she wrote many articles for the advancement of women pilots in peaceful aviation during the 1930s. Because Gower was

²⁰ "A Member of Britain's Air Transport Auxiliary," *New York Times*, January 1, 1940; Merry, *Women Military Pilots of World War II*, 11-14; Whittell, *Spitfire Women of World War II*, 57.

²¹ Elizabeth S. Bell, *Sisters of the Wind: Voices of Early Women Aviators* (Pasadena, CA: Trilogy Books, 1994), 79; Merry, *Women Military Pilots of World War II*, 12.

²² Bell, *Sisters of the Wind*, 79, 80, 86, 87.

²³ Whittell, *Spitfire Women of World War II*, 56-57, 60.

the most prominent woman to advocate for the inclusion of female pilots in British wartime aviation, she was subsequently appointed as leader of the Women's Section of the ATA.²⁴ Gower's humble reputation in aviation circles was also an important influence to her appointment within the ATA as British air ministers and RAF commanders believed she had the ability to maintain her composure as a leader rather than a record-breaking pilot.²⁵

Gower's determination in her pre-war efforts and advocacy for women in wartime aviation set the stage for the creation of the Women's Section in the ATA and the Women's Airforce Service Pilots organization in America. In fact, Gower was well-known among many female pilots not only in Britain but in the United States as well.²⁶ It is important to note at this point that Gower did not approach her position as the head of the Women's Section with feminist ideals or objectives regarding women in aviation. Gower rather advocated for women in ferrying positions because she was convinced that women were an untapped resource to support Britain in the war.²⁷ This support towards the war effort was a common thread in the formation of Allied women aviation units and it was a factor that mostly stood out to government and military officials who established them.

D'Erlanger, as the head of the ATA and British Airways, explained that he appointed Gower because he appreciated the subtlety in her aviation career and felt that she was like-minded as an aviator with other male pilots. Furthermore, d'Erlanger was

²⁴ Merry, *Women Military Pilots of World War II*, 21.

²⁵ Whittell, *Spitfire Women of World War II*, 32, 44-45.

²⁶ Ibid., 26-28; Jackie Moggridge, *Spitfire Girl: My Life in the Sky* (London: Head of Zeus Ltd.), 88-90; Nancy Miller Livingston Stratford, *Contact! Britain! An American Woman Ferry Pilot's Life During WWII* (California: CreateSpace Independent Publishing Platform, 2011), 31.

²⁷ Merry, *Women Military Pilots of World War II*, 21-23; Whittell, *Spitfire Women of World War II*, 52-53.

also convinced that Gower was the most suitable for the job because of the amount of work that she dedicated towards women's inclusion in aviation.²⁸ He shied away from hiring famous women pilots, like the record-breaking Amy Johnson, because he knew that RAF command would have been daunted by the prospect of working with female celebrity pilots. The issue with this option from d'Erlanger's perspective was that a popular and record-breaking woman pilot would have brought unnecessary attention to the Women's Section and RAF command could have possibly misunderstood the unit's purpose if record-breaking women were seen jumping into RAF aircraft during wartime.²⁹

One final factor that contributed to Gower's appointment was her position in society and politics where she had connections to the elites as the daughter of an MP, which gave her a strong voice in aviation circles.³⁰ Naturally, Gower's connections to the political elite and her public efforts to bring women pilots into the war effort gave her the greatest opportunity for success. This was an aspect of Gower that Amy Johnson, the first woman to fly solo to Australia, wrote about with an envious tone to her father shortly after Gower's appointment. Johnson wrote that "had I played my cards right and cultivated the right people, I could have got the job that Pauline Gower has got."³¹ However, these influences as separate factors could only get someone of Gower's status so far, even if Britain was one of the more accepting powers towards women pilots. Determination undoubtedly allowed Gower to establish the first official women's aviation unit to ferry various military aircraft in Britain.

²⁸ Stratford, *Contact! Britain!*, 31, 32; Whittell, *Spitfire Women of World War II*, 44, 60.

²⁹ Whittell, *Spitfire Women of World War II*, 44.

³⁰ *Ibid.*, 12-13, 52, 60.

³¹ *Ibid.*, 60.

By the time the war began in 1939, Britain's Prime Minister Winston Churchill was adamant about building an air power twice as strong as the German Luftwaffe. Churchill's encouragement eventually expanded well enough to allow women to gain a foothold in assisting the Royal Air Force through the Women's Royal Auxiliary Air Force's (WAAF) civilian roles. Roles within the WAAF typically consisted of working as operators in aviation radar stations to detect enemy aircraft or performing office work for RAF commanders.³² It was shortly thereafter that this foothold allowed for the further advancement of British women in aviation with the ATA due to wartime necessity. After the RAF called for all hands on deck to aid against the encroaching German aerial invasion that led to the Battle of Britain in July 1940, Gower became the woman to lead women's incorporation into the ATA. Gower was officially given the green light to recruit the first volunteers for the Women's Section in November 1939.³³ On January 1, 1940, the first eight women of the ATA were formally employed under the rank of second officer and were put to work at the Hatfield Aerodrome. These eight women were Rosemary Rees du Cros, Winnifred Crossley, Gabrielle Patterson, Joan Hughes, Marion Wilberforce, Margaret Fairweather, Mona Friedlander, and Margaret Cunnison.³⁴

The First Eight were also women who came from wealthy and socially elite backgrounds that allowed them to gain plenty of aviation experience, their backgrounds were key to their appointments as ferry pilots because they resembled Gower's

³² *The Battle of Britain*, directed by Frank Capra and Anthony Veiller (1943; Renton, WA: TOPICS Entertainment, Inc., 2008), DVD; Moggridge, *Spitfire Girl*, 56-58, 78; Whittell, *Spitfire Women of World War II*, 4, 9, 244; Thomas Zeiler's *Annihilation: A Global Military History of World War II* notes that Churchill was focused on a policy of attrition warfare throughout his political and military career which explains his desire for a stronger air force, but his arguments were also backed by like-minded RAF leaders who ascribed to an offensive doctrine according to John R. Carter's *Airpower and the Cult of the Offensive*.

³³ Merry, *Women Military Pilots of World War II*, 22; Whittell, *Spitfire Women of World War II*, 53.

³⁴ Merry, *Women Military Pilots of World War II*, 23; Stratford, *Contact! Britain!*, 31.

reputation as a pilot.³⁵ The fact that these women came from an aristocracy should not misrepresent who they were and what they did for the ATA during the war. The First Eight, with Gower as their leader, were an inspiration to many women pilots in many parts of the world who wanted to aid the war effort against Nazi Germany. Their outstanding service to the ATA made the Women's Section a success for Britain's war effort. In fact, it is crucial to note that Gower's leadership was so effective for the Women's Section that she was able to make her strides in the aviation sphere "without alienating men."³⁶

Stationed within the ATA's headquarters of De Havilland School of Flying at White Waltham, "the girls were assigned to stations where the rest of the personnel were men" and they later formed an all-female pool of pilots by August 1942.³⁷ These women were frequently questioned by men who had doubts regarding the women's abilities to fly, but they created a strong bond between each other as dear friends and sisters. This bond, along with the excellent work that ATA women performed by ferrying planes in good conditions, allowed the Women's Section to rise in numbers after Gower created a second women's ferry pool with Margot Gore as commander at Hamble, Hampshire. Gower even established a women pilot's club in London for the ATA volunteers because women were not allowed to relax in male pilot service clubs.³⁸ The efforts of the ATA's Women's Section resulted in 168 women pilots to comprise eleven percent of the organization's 1,515 personnel by 1945 with Gower as the "Queen Bee" of the section.³⁹

³⁵ Whittell, *Spitfire Women of World War II*, 63-67, 82.

³⁶ Whittell, *Spitfire Women of World War II*, 110-111.

³⁷ "ATAgirls" *New York Times*, August 9, 1942.

³⁸ Merry, *Women Military Pilots of World War II*, 22-23; Whittell, *Spitfire Women of World War II*, 175.

³⁹ Gerard d'Erlanger, "ATA Statistics – Establishment," Documents, Maidenhead Heritage Centre and ATA Exhibition and Archive, last accessed October 10, 2022, <https://archive.atamuseum.org/documents.php>; Stratford, *Contact! Britain!*, 32; "Women Join and Do 'a

Women in the ATA initially flew trainers like the open cockpit De Havilland Moths and Miles Magisters because they were not trusted to pilot advanced models. These trainers were grouped as Class 1 aircraft out of six classifications in the ATA; the higher the classification number, the more advanced the aircraft was.⁴⁰ The training required to pilot these advanced models was also only offered to men and it took the women nearly two years of persistence to deliver fighter models across Britain. This was not too difficult to achieve after the first year of their work because the First Eight quickly became reputable among the ATA for their accident-free records. After four of the First Eight, Crossley, Fairweather, Hughes, and Rees, successfully flew a Hurricane fighter in July 1941, more women were permitted to pilot this challenging aircraft.⁴¹ Gower also had a hand in gaining women access to fly fighter models and heavier aircraft once the ATA recruited more pilots into the Women's Section. Jackie Souror (later Moggridge), one of the Women's Section's prominent members, recalled in her interview with Gower that she mentioned how "we fly only light aircraft at the moment, but . . . we'll be flying the heavier stuff soon if I have any say in the matter."⁴²

It was shortly after these efforts from Gower and the First Eight that ATA women were allowed to fly advanced fighters and heavier aircraft across Britain during the rest of the war. However, special authorization was required for women to fly these types of aircraft by the Women's Section commanding officer well before any flights were conducted. Some of these specific aircraft included the Wellington, a five-man crew

Man's Job," Home, Air Transport Auxiliary, Museum & Archive at Maidenhead Heritage Centre, accessed July 4, 2022, <https://atamuseum.org/>.

⁴⁰ "Anything to Anywhere - A true story of courage, skill and sacrifice," Home, Air Transport Auxiliary Museum & Archive at Maidenhead Heritage Centre, accessed July 4, 2022, <https://atamuseum.org/>; Jacky Hyams, ed. *The Female Few: Spitfire Heroines* (Gloucestershire, England: The History Press, 2016), 34.

⁴¹ Whittell, *Spitfire Women of World War II*, 11-12, 95, 111-112.

⁴² Moggridge, *Spitfire Girl*, 90.

heavy warplane; the Halifax, a giant heavy four engine bomber; and the Lancaster, another common heavy bomber in Britain. Stirlings, B-17s, B-24s, B-25 Mitchells, amphibious Walrus', and Albemarles were commonly flown by ATA women as well.⁴³ Authorization to pilot aircraft was typically distributed first thing in the morning as a part of the women's daily routine via a set of ferry-chits along with their program for the day at the airfield's operations office. An ATA woman's program usually consisted of two to three flights from one airfield to another, and they received handling notes that described their assigned aircraft's features if they were given a plane they never flew before.⁴⁴ Despite the fact that many of these women never flew heavy aircraft before, they were quite innovative for breaking British gender norms that believed women were incapable of flying heavier planes.

There was one fighter that the members of the Women's Section were most eager to fly and it was the Spitfire. The Spitfire was quite the powerful aircraft for its time as it quickly ran at 400 mph while in the sky which quickly became Britain's most innovative plane in terms of airpower. However, the biggest complaint about the Spitfire from male pilots was that it was terrible on the ground as its long nose blocked forward vision in the cramped cockpit, the engine tended to overheat if the plane did not take off quickly enough, and it had narrow landing gear which caused its wings to run against the ground from ground looping. These complaints, however, were not brought up as frequently by ATA women when they flew Spitfires in 1941 because they enjoyed many of the

⁴³ Stratford, *Contact! Britain!*, 96, 119-127, 178.

⁴⁴ "A Day's Work," Home, Air Transport Auxiliary Museum & Archive at Maidenhead Heritage Centre, accessed July 4, 2022, <https://atamuseum.org/>; Molly Rose, *The Female Few*, ed. Jacky Hyams, 106; Moggridge, *Spitfire Girl*, 102; Stratford, *Contact! Britain!*, 20.

aircraft's features.⁴⁵

The first woman to fly a Spitfire was Margaret Fairweather, one of the First Eight. Her noteworthy flight helped introduce the aircraft to ATA women and established its significance for the Women's Section. Lettice Curtis was another reputable pilot whose skills with the Spitfire inspired other women to fly the aircraft.⁴⁶ Fairweather and Curtis, despite their cold demeanor, made impressive strides for women in the ATA to pilot advanced aircraft through sheer determination and service for their country. In many ways, their enthusiasm for flying the Spitfire led to the belief among ATA members that the aircraft was perfectly designed for women. While the Spitfire's sleek and confined space made it difficult for men to pilot the ship, slender female pilots found the cockpit with enough room to move around. Moreover, many ATA women were simply fascinated by the power, control, and responsiveness the Spitfire featured compared to previous slower and less advanced aircraft they flew.⁴⁷

The fact that women flew Spitfires was not meant for public knowledge, but it quickly became known by everyone across the world after Fairweather's first flight. The Spitfire soon after garnered a reputation for being the favorite aircraft of almost all ATA women during the war. Jackie Moggridge, the first woman to perform a parachute jump in South Africa, was one ATA pilot completely captivated by the Spitfire during the war and she felt that it defined her as a ferry pilot. As she recalled in her autobiography, *Spitfire Girl: My Life in the Sky*, Moggridge longed to fly a Spitfire since she joined the ATA in 1941, and she described her first impressions when she got the chance to ferry

⁴⁵ Whittell, *Spitfire Women of World War II*, 28-29, 45-46, 114-117, 241-242.

⁴⁶ *Ibid.*, 7-8, 12, 112.

⁴⁷ *Ibid.*, 4, 115-116.

one in August 1941:

The Spitfire, a machine with the simplicity of features of a beautiful woman, stood outside the hangar basking as proudly as a thoroughbred in the warm sunshine. I clambered into the cockpit as warily as a rider mounting a highly spirited stallion and sat gazing absently at the instruments. It seemed the most natural thing in the world to be sitting there in the cockpit, as though my entire life had led to this moment.⁴⁸

Some of the language that Moggridge used in this excerpt was similar to the impressions of other ATA women who tended to write about the Spitfire with overt fondness and a quasi-sexual language in contrast with ATA men who noted their frustrations on the plane's construction.⁴⁹ Another example of this was when Yvonne MacDonald, another pilot for the ATA, described her experience with the Spitfire like "it was always as if you had wings sewn on your back. . . . It was so manoeuvrable. [sic]"⁵⁰ In this sense, the Spitfire was commonly perceived with a feminine lens because the women who flew them surpassed male expectations and complaints about the aircraft. The impact of this perception is that some recent historical works of ATA women during World War II have written their analyses with this same feminine lens. Giles Whittell, a well-respected English writer for *The Times*, is one author who wrote this way in *Spitfire Women of World War II* where he stated that the Spitfire's service and fame outshone the "manlier" Hurricane during the Battle of Britain.⁵¹ While aircraft like the Spitfire and Hurricane were perceived with a gendered lens, the requirements necessary to pilot these planes was the most important detail to an ATA pilot's career.

⁴⁸ Moggridge, *Spitfire Girl*, 103.

⁴⁹ Rose, *The Female Few*, ed. Jacky Hyams, 108-109; Whittell, *Spitfire Women of World War II*, 116-117.

⁵⁰ Yvonne MacDonald, *The Female Few*, ed. Jacky Hyams, 91.

⁵¹ Whittell, *Spitfire Women of World War II*, 115.

Requirements for recruitment in the ATA was the same for men and women, but some were eased during the war to recruit more pilots for the war effort. Candidates had to have a minimum of a class “A” license and two hundred hours of flight experience, but by 1941, the minimum flight experience had changed to fifty hours. It was not until mid-1942 that candidates were recruited who had “any flying experience at all, even if it had not resulted in a license,” and by mid-1943 no flying experience was required. This initiated a series of newcomer pilots to be trained *ab initio* (from scratch).⁵² Monique Agazarian later recalled her recruitment in 1943 in an interview with the Maidenhead Heritage Centre:

Agazarian: I started writing to the ATA [by 1941], and of course I even told them I’d never done any flying and I wrote, I think, every three months. . . In ’43 I got a letter from them saying they were recruiting *ab initio*. . . and I was trained from scratch.

Interviewer: Do you know what the criterion was for selection?

Agazarian: I think anybody who had any influence to pull strings, and I had none I suppose, I don’t know. They didn’t know really, then you had to do your flying training. I think people who were enthusiastic, people who were fit, and I think probably my background with my brother being a battled Britain pilot. I don’t know, but they let us in.⁵³

Agazarian was not wrong in her assumptions about who applicants knew and what their backgrounds were. There were quite a few women out of the one hundred and sixty-eight who were from famous backgrounds, even their leader came into her position partly because of her background; two other examples of this were with Amy Johnson and Jackie Moggridge.⁵⁴ Surprisingly, these two had a star struck moment with each

⁵² Schrader, “Winged Auxiliaries,” 190; Moggridge, *Spitfire Girl*, 72-75.

⁵³ “Monique Agazarian Audio Recording,” interview by Maidenhead Heritage Centre and ATA Exhibition and Archive, <https://archive.atamuseum.org/audio.php>.

⁵⁴ Moggridge, *Spitfire Girl*, 15-20, 88-90; Whittell, *Spitfire Women of World War II*, 31-40.

other when they first met as Moggridge recalled in her autobiography: “I rushed to her and gushed: ‘Miss Johnson, may I have your autograph?’ She stared at me, astonished. There was a painful silence. . . Suddenly she grinned: ‘My dear child. I’ll swap it for yours.’”⁵⁵ Johnson’s convictions for aviation served as an aspiration for many women in the early twentieth century, and as such she remained an influential figure that set a clear example of the lengths women needed to take in the sphere of aviation.

Training for women in the ATA was relatively unique because they had to receive a slightly different education than male pilots in the RAF’s Central Flying School. They received training from the British Overseas Airways Corporation’s (BOAC) flight and ground school as well as brief training from the RAF Central Flying School.⁵⁶ The chief flying instructor of the BOAC schools, A.R.O. Macmillan, provided instruction on military aviation along with subjects of meteorology, war balloons surrounding towns and factories, map reading, signals, technical data, engines, and navigation. Ground school provided the women with knowledge on specifications of aircraft models, how to utilize Morse code, recognize a variety of signals, and how to use a flare gun (known as a Verey pistol at the time). ATA women also learned how to fly the aircraft without the use of a radio because of the fear that Germans listened in on Allied communications.⁵⁷ Pages from these women’s training notes further illustrated sketches of engine schematics, calculated velocities, and hydrometer levels for aircraft.⁵⁸

⁵⁵ Moggridge, *Spitfire Girl*, 90.

⁵⁶ *Ibid.*, 101-102.

⁵⁷ Pat Jackson, “Ferry Pilot,” filmed 1941 at Crown Film Unit, England, Great Britain, video, 31:02; Merry, *Women Military Pilots of World War II*, 54-5; Whittell, *Spitfire Women of World War II*, 23.

⁵⁸ “Elizabeth MacDougall Training Notes,” Training Notes, Maidenhead Heritage Centre and ATA Exhibition and Archive, last accessed October 10, 2022, <https://archive.atamuseum.org/trainingnotes.php>; “Marigold Rowland Training Notes,” Training Notes, Maidenhead Heritage Centre and ATA Exhibition and Archive, last accessed October 10, 2022, <https://archive.atamuseum.org/trainingnotes.php>; “Maureen

The ATA stressed safety when it came time for the women to finally perform dual flight instruction and solo flights since all airplanes had to be delivered to the RAF in excellent condition. Ferrying the planes with a reckless attitude was both prohibited by the ATA and discouraged among the ATA women. If any women flew recklessly then it would have called for disciplinary action on the pilots who delivered them, and it did not matter what conditions they encountered while enroute.⁵⁹ With those consequences in mind, ATA women fearfully insisted on performing their work carefully and cautiously during the war. Their fear did not stem from a concern over their safety, but it came from the fact that they did not want to “thwart the war effort by damaging the aircraft in any way.”⁶⁰ It was fortunate enough that this fear was equally a motivator for the ATA women’s determination to support the war effort at the time, which in turn allowed them to avoid crashing most of the planes they ferried. In the few times there were crashes, they were mainly due to a mechanical failure, such as an engine cutting out, or because of British weather. Only a few crashes were the result of an error in pilot judgement as records from ATA memoirs indicate that 4.9 percent of ATA women were killed during their service compared to the 8.1 percent of ATA men who were killed.⁶¹

While ATA women received a different education and were held to higher standards than ATA men during their deliveries, many of the women recalled that they did not face any opposition from the men except for initial doubts about their flying

Shiel Training Notes: Part 1,” Training Notes, Maidenhead Heritage Centre and ATA Exhibition and Archive, last accessed October 10, 2022, <https://archive.atamuseum.org/trainingnotes.php>.

⁵⁹ Hyams, ed. *The Female Few*, 19; MacDonald, *The Female Few*, ed. Jacky Hyams, 85; Merry, *Women Military Pilots of World War II*, 54-55.

⁶⁰ Hyams, ed. *The Female Few*, 19.

⁶¹ Mary Ellis, *The Female Few*, ed. Jacky Hyams, 128; MacDonald, *The Female Few*, ed. Jacky Hyams, 85; Merry, *Women Military Pilots of World War II*, 111-112; Rose, *The Female Few*, ed. Jacky Hyams, 107-108.

skills.⁶² However, there was one major issue associated with the ATA and that was the unequal pay between male and female pilots during the war. Women were initially hired at a pay-rate of 230 pounds annually, which amounted to 80% of the pay men received.⁶³ It was not until May 18, 1943, that the issue was brought up in the House of Commons to Sir Stafford Cripps, the Minister of Aircraft Production, by Miss Irene Ward, the Conservative MP for Wallsend. The parliamentary papers from that date revealed the sudden change in policy:

Miss Ward asked the Minister of Aircraft Production whether women pilots of the Air Transport Auxiliary receive the same rates of pay as men?

The Minister of Aircraft Production (Sir Stafford Cripps): It has been decided that from the beginning of next month women pilots of the Air Transport Auxiliary who are engaged on full flying duties will receive the same rates of pay, rank for rank, as men similarly employed.

Miss Ward: Is the right [honorable] and learned Gentleman aware how gratifying it is that this decision has been arrived at without pressure from the women Members of the House?

Sir S. Cripps: I am grateful.

Mr. Molson [(MP for High Peak)]: Is it the case that pilots in the Air Transport Auxiliary are paid at a much higher rate than pilots of the Royal Air Force?

Sir S. Cripps: That is another question.

Sir F. Fremantle [(MP for St. Albans)]: From what date will this operate? Will it be retrospective?

Sir S. Cripps: From the beginning of next month. It will not be retrospective.⁶⁴

Although this decision seemed sudden, it was thanks to Pauline Gower's prior

⁶² Ellis, *The Female Few*, ed. Jacky Hyams, 126; MacDonald, *The Female Few*, ed. Jacky Hyams, 84.

⁶³ Merry, *Women Military Pilots of World War II*, 48; Schrader, "Winged Auxiliaries," 188.

⁶⁴ *Air Transport Auxiliary (Women Pilots' Pay)*, HC 1942-43, vol. 389. 936-937.

pressure on Cripps to increase the pay of women pilots that helped it pass through legislation. She subtly made two attempts to urge the idea; Cripps informed Gower in her first attempt that he was unable to make any changes to payment rates, but Gower physically visited Cripps in her second attempt and warned him that Ward would soon raise the issue in the House of Commons. This warning appeared to worry Cripps as it led him to prepare the announcement for equal pay in fear of embarrassing the British government.⁶⁵ Because of this, Whittell speculated that it was possible Gower formulated a plan to involve Miss Ward in the mission to apply pressure on Cripps for women's equal pay.⁶⁶ By June 1943, the decision was fully implemented, and ATA women gained equal payment to their male counterparts. This victory for British women pilots eventually paved the way for questions about a woman's position within the postwar world.⁶⁷

Not only was the ATA a success in terms of gender neutrality, but it also became a popular organization that curated a diverse roster of women pilots from all over the world. It was evident to many women all over that the war would not end any time soon when it advanced into 1941; if there was any hope to bring it to a close then they had to contribute where they could. It turned out that the ATA was the perfect opportunity for foreign women, especially those with aviation experience, to aid in the war effort when it was not available in their countries. As a result of this, the ATA recruited and trained women from twenty-five different countries like South Africa, Argentina, New Zealand, Poland, Chile, Canada, Ireland, Holland, and the United States. The ATA became

⁶⁵ Merry, *Women Military Pilots of World War II*, 48-49.

⁶⁶ Whittell, *Spitfire Women of World War II*, 234.

⁶⁷ *Ibid.*, 232-234; Merry, *Women Military Pilots of World War II*, 48; Barbara Ward, "Women in Britain," in *Foreign Affairs* 22, no. 4 (1944): 564, 566-570.

commonly known around Britain as The Foreign Legion of the Air based on its diverse personnel.⁶⁸ Determination is evidently present in the women who came from foreign countries to learn how to fly and aid in the war effort, but determination can also be found on a deeper level with some of the foreign women's stories.

One example of deeper determination with these women was evident in the story of Margot Dunhalde, the first Chilean woman awarded with a commercial pilot's license. In April 1941, Dunhalde left Chile with 139 other volunteers for Britain to join Charles de Gaulle's Free French movement. Unfortunately for Dunhalde, political relations between Churchill and de Gaulle were strenuous at best. Churchill initially doubted the true intentions of the Chilean volunteers and Scotland Yard immediately detained them when they landed in Britain. Dunhalde had to wait three months before she was recommended to the ATA and even then she struggled to maintain her role in the ATA, despite her expert flying skills, because she did not speak any English or French.⁶⁹ Other stories of determination are seen with the Polish pilots Anna Leska, Stefania "Barbara" Wojtulanis, and Jadwiga Pilsudska who escaped from Poland after Hitler's invasion. Leska and Pilsudska were the only women out of the three who were shot at by the Germans in the air during their escape because Leska was a courier for the Polish Air Force resistance and Pilsudska was the daughter of the founder of modern Poland, Marshal Jozef Pilsudski.⁷⁰

American women were also determined as contributors to the ATA, and they

⁶⁸ Hyams, ed. *The Female Few*, 15, 38-39; "Legion of the Air," Home, Air Transport Auxiliary Museum & Archive at Maidenhead Heritage Centre, accessed July 4, 2022, <https://atamuseum.org/>; Merry, *Women Military Pilots of World War II*, 39; Stratford, *Contact! Britain!*, 36-37; Whittell, *Spitfire Women of World War II*, 118.

⁶⁹ Whittell, *Spitfire Women of World War II*, 118-124.

⁷⁰ *Ibid.*, 76-81; Hyams, ed. *The Female Few*, 38-39; Merry, *Women Military Pilots of World War II*, 39.

were the largest foreign group to work in the Women's Section with twenty-five members. Because America did not join the war until December 1941, many American women pilots were not utilized for ferry work and were mainly restricted to civilian roles like nursing, office work, and telecommunication operations. One famous American women pilot, Jacqueline Cochran, tried to emphasize the importance women pilots could offer the U.S. if war ever broke out. Cochran was determined to prove the worth of utilizing women pilots after the war reached the U.S. and she recruited twenty-five American women into the ATA in April 1942.⁷¹ Cochran was named the head of the American section for the ATA, but she was a controversial figure at best because she never flew and strictly maintained her role as a spectator over her American volunteers. This spectator role was so Cochran could judge the worth of her volunteers as pilots for a potential American program.

It was not until September 1942 that Cochran was allowed to form her own women's ferry unit in the U.S. after she discovered the existence of the Women's Auxiliary Flying Squadron.⁷² From that point on, Ann Wood, one of the American volunteers, was abruptly left in charge of the American women in the ATA until their contracts with the organization expired in 1945.⁷³ Wood ushered in a great period of service from the American volunteers, despite Cochran's controversial leadership, thanks to their early determination to aid in the war effort before the U.S. jumped late into the

⁷¹ "American Women to Ferry Planes: Jaqueline Cochran Recruiting Groups to Serve in British Isles Until Needed by U.S.," *New York Times*, January 24, 1942; "More U.S. Women to Fly in Britain: Jacqueline Cochran, the Chief of First Group, Will Get Help in Ferrying Soon," *New York Times*, June 1, 1942; "Group Serving in Britain: American Girls on Air Ferry Duty Are Under Contract," *New York Times*, September 12, 1942.

⁷² Whittell, *Spitfire Women of World War II*, 154-156.

⁷³ Stratford, *Contact! Britain!*, 33-34.

war.⁷⁴ Unfortunately, while the ATA is hailed for having the highest number of colored and foreign women pilots over the other Allied women sections, there is no evidence that any Black women joined the organization as pilots to date.

These women had the training, the know-all, and the experience, for most, to ferry these planes effectively across Britain, but this was not enough to prevent harsh criticism from British men. It is also evident that some British women were strong critics against women flying in the ATA because they believed that women pilots only signed up for the purpose of chasing hobbies in aviation rather than to support the war effort.⁷⁵ Joy Lofthouse, one of the ATA women pilots, summarized in Jacky Hyams' *The Female Few* how global cultural norms were an influence on British attitudes towards women ferrying Spitfires and military planes. She specifically remembered that "as young girls, the emphasis for us had always been on marriage and children. And marriage was for life, there were no life-long aspirations of work or careers for women. So being able to go into the Forces to be taught to fly was virtually undreamed of."⁷⁶

It essentially became common for British men to experience shock and skepticism when a woman crawled out of the cockpit after a successful landing. One strong critic of the women pilots was the editor of *Aeroplane Magazine*, C.G. Grey. Grey took the opportunity to disparage women from flying in a reply to a letter that supported Gower where he claimed that women were more suited to work traditional feminine jobs than ferry military planes.⁷⁷ Grey even went as far as to argue that "the menace is the woman who thinks that she ought to be flying a highspeed bomber when she really has not the

⁷⁴ Whittell, *Spitfire Women of World War II*, 168-169.

⁷⁵ Hyams, ed. *The Female Few*, 31; Whittell, *Spitfire Women of World War II*, 28.

⁷⁶ Joy Lofthouse, *The Female Few*, ed. Jacky Hyams, 49-50.

⁷⁷ Whittell, *Spitfire Women of World War II*, 27.

intelligence to scrub the floor of a hospital properly.”⁷⁸

The “menace” that Grey mentioned was portrayed as a threat towards Britain’s gendered culture and social norms, but critiques like Grey’s were a dramatic rarity since most perspectives towards ATA women were of initial skepticism within the ATA and RAF. These instances typically expressed surprise from ATA and RAF men after they discovered that a woman flew and landed military aircraft; sometimes the men double checked the cockpit of the plane once it was grounded to see if there was a missing pilot.⁷⁹ The reactions were particularly evident after women landed heavier planes like a Wellington or a Halifax. ATA and RAF leadership sometimes exclaimed that men who complained about flying such planes should be capable of flying them if a woman did it, a significant emasculating tactic for the time.⁸⁰ It is not clear why this was shocking for some men, women clearly flew planes before the outbreak of World War II, and it has been stressed how such women made headlines for their accomplishments. The answer for these reactions, perhaps, was that these women were determined enough to fly heavy military vehicles. This, of course, granted them a foothold into the military sphere which was typically a male dominated position.

Male skepticism towards female pilots were easily proven wrong over time as they shared the same experiences with ATA women. This connection was built by both men and women who equally flew the same type of aircraft and shared similar

⁷⁸ Phil Davison, “Mary Ellis, 1917-2018; Volunteer Flew Aircraft to British Bases During WWII,” *Los Angeles Times*, July 28, 2018.

⁷⁹ Davison, “Mary Ellis, 1917-2018; Volunteer Flew Aircraft to British Bases During WWII,” *Los Angeles Times*, July 28, 2018; Moggridge, *Spitfire Girl*, 92-93; Stratford, *Contact! Britain!*, 91; Ceylan Yeginsu, “Mary Ellis, Who Flew British Spitfires During Second World War, Dies at 101,” *New York Times*, July 30, 2018.

⁸⁰ Merry, *Women Military Pilots of World War II*, 66-67; Whittell, *Spitfire Women of World War II*, 118, 200-204.

experiences. ATA men quickly recognized that women pilots could fly the same type of aircraft as them thanks to their astonishment when, as mentioned earlier, they discovered that the pilot who expertly flew and landed a Tiger Moth or Spitfire was a woman.⁸¹ This was another unintentional payoff that resulted from the women's determination to aid in the war effort by flying for the military, like equal pay between the genders and the diverse cast of women that filled the ATA. However, the most notable experience that men and women experienced together in the ATA was the dangers of flying, regardless of how the men initially thought of the women.⁸² Flying, particularly in Britain, was an immensely dangerous career, but the most significant dangers can be summed up by two factors: Britain's wartime conditions and weather.

Britons frequently defended themselves against the German Blitz shortly after the ATA allowed women to ferry planes for the RAF in 1940. This meant that flying above Britain bore a substantial risk from multiple factors for all pilots, regardless of their gender. The risk of attack mid-delivery by German Luftwaffe fighter and bomber planes was the first of these factors and it was the deadliest for any ATA pilot who crossed the country. It was not a common occurrence, but ATA women were easily susceptible to this danger since they flew unarmed (both on their person and on the plane) with no radio, no functional navigation instruments, and no training in combat maneuvers. This situation became even riskier when considering that anti-air war balloons were posted all over Britain and led to some ATA pilots to crash into them if they did not pay attention to

⁸¹ Ellis, *The Female Few*, ed. Jacky Hyams, 126, 129-130; MacDonald, *The Female Few*, ed. Jacky Hyams, 84; Merry, *Women Military Pilots of World War II*, 67; Moggridge, *Spitfire Girl*, 93, 127.

⁸² Schrader, "Winged Auxiliaries," 192-193.

their surroundings.⁸³ Another substantial risk that came with flying over war-torn Britain was being mistaken as enemy aircraft and taking fire from eager British anti-air guns. Without any means to identify themselves as friendlies, ATA women had to maneuver around friendly fire from time to time if they ever accidentally left the safe air corridors designated for friendly aircraft. Luckily enough, there were never any serious injuries since the women understood to immediately leave the area where the anti-air fire came from or to try and get to their destination as soon as possible.⁸⁴

Britain's weather posed the greatest threat to the safety of the pilots in the ATA during World War II. The weather was simply not conducive for flight during the war because the frequent changes in the atmosphere made forecasting attempts unreliable for the pilots.⁸⁵ This presented a double-edged sword for the British as weather made flying a challenge for enemy incursions in addition to their anti-air balloons, but it also brought that same level of difficulty for their own pilots at the same time. Almost every account from ATA women noted the nightmare that was British weather where they often described it as atrocious or "as trustworthy as a rabid dog."⁸⁶ Lofthouse gave a brief and astute description of how the weather impacted ATA operations and how the women learned to cope:

The big hazard, of course, was the weather. If the weather was bad, without radio, you never knew within a mile or so where you actually were. So you had to be completely confident that whatever you were being asked to do was within your capabilities. And our six months training was effectively slowed down by the weather. People who trained in the summer got through more quickly than those, like me, training through a

⁸³ Hyams, ed. *The Female Few*, 14; Lofthouse, *The Female Few*, ed. Jacky Hyams, 56-57; Merry, *Women Military Pilots of World War II*, 98; Stratford, *Contact! Britain!*, 74-75, 111.

⁸⁴ Ellis, *The Female Few*, ed. Jacky Hyams, 128; Merry, *Women Military Pilots of World War II*, 98; Stratford, *Contact! Britain!*, 8, 112.

⁸⁵ Frost, *The Female Few*, ed. Jacky Hyams, 154; Merry, *Women Military Pilots of World War II*, 95-96; Stratford, *Contact! Britain!*, 73.

⁸⁶ Moggridge, *Spitfire Girl*, 97; Stratford, *Contact! Britain!*, iii.

winter. We had an 800ft ceiling – cloud had to be at least 800ft high – and 1500 yards visibility. But of course, you could take off and run into bad weather a few miles up the road.⁸⁷

Britain's weather was such a large threat that most of the ATA women who died in the war perished because of it, and as such it served as a grim reminder for many to remain vigilant about the weather.⁸⁸ Amy Johnson was the most prominent victim of the weather after she was caught in a storm and her plane crashed into the Thames Estuary where she quickly drowned under the raging waters in January 1941. Johnson was pronounced dead soon afterwards, and a significant damper was placed on the Women's Section's morale.⁸⁹ However, the ATA women were hardy workers and persisted in carrying out their deliveries with these risks in mind because they were insistent in supporting Britain's war effort and ending the war.

Crashes also served as a common occurrence during the war as some were attributed to weather, but others were caused by technical issues with the planes or rarely by pilot error.⁹⁰ Elsie Joy Davison, Bridget Hill, and Betty Sayer were the first casualties within the ATA female pool to die from ferrying accidents. Davison died from a crash during an instructional flight while Hill and Sayer died after their taxi plane crashed through the roof of a house close to White Waltham.⁹¹ According to d'Erlanger's 1945 ATA report, a total of fourteen ATA women pilots died because of fatal accidents which

⁸⁷ Lofthouse, *The Female Few*, ed. Jacky Hyams, 54.

⁸⁸ Ibid., 51; "ATA Casualties," Home, Air Transport Auxiliary Museum & Archive at Maidenhead Heritage Centre, accessed July 4, 2022, <https://atamuseum.org/>; D'Erlanger, "ATA Statistics – Establishment," Documents, Maidenhead Heritage Centre and ATA Exhibition and Archive, last accessed October 10, 2022, <https://archive.atamuseum.org/documents.php>; Moggridge, *Spitfire Girl*, 97.

⁸⁹ Hyams, ed. *The Female Few*, 175-176; Moggridge, *Spitfire Girl*, 97-100.

⁹⁰ "Crash Kills Amy Mollison: Noted British Aviatix Drowns While Ferrying Plane for R.A.F.," *Los Angeles Times*, January 7, 1941; Merry, *Women Military Pilots of World War II*, 97; Moggridge, *Spitfire Girl*, 125-127; Schrader, "Winged Auxiliaries," 192; Whittell, *Spitfire Women of World War II*, 209-215.

⁹¹ Whittell, *Spitfire Women of World War II*, 24-25, 46-50; "Woman War Flier Killed: British Air Auxiliary Pilot is First Casualty in Such Service," *New York Times*, July 14, 1940.

were approximately 0.92 percent of the 1,515 personnel; seasoned pilots like Margaret Fairweather and Amy Johnson were only a few of the fourteen victims who fell to these disasters.⁹² The result of these deaths conditioned ATA women to expect death around every corner with their job and they grew accustomed to the danger.⁹³

Women pilots in the ATA took the concept of death in the service with stride, much better than their male counterparts, and they did not let death hinder their dreams of flying in the service for their country. Whittell made a particular note of this attitude in *Spitfire Women of World War II* where he found “repeated references in diaries and memoirs to men sitting around in common rooms on ‘wash-out’ days content to leave the verdict of the weather people unchallenged, while women took off into the murk on the off-chance of getting through.”⁹⁴ Many British women suffered through great sadness over the loss of their comrades and friends, but they were also skilled in hiding their emotions from each other. This came from the fact that many ATA women adopted a grim philosophy that pilots who were sent out on assignment would not return because they met some terrible fate.⁹⁵ Mary Ellis’ account of her own experiences with loss during the war serve to describe the internal struggle many of the women went through during the war:

There’d been an accident in a Mosquito flying out of Lasham, in Hampshire involving two girls . . . Both girls were dead. The pilot was my friend Dora Lang . . . I didn’t talk to anyone about it. It was just too sad. Every day, we knew this was a reality. But at the same time, we never expected anything to happen. You knew the danger but you kept it right at the back of your mind. If you didn’t concentrate completely on what you

⁹² D’Erlanger, “ATA Statistics – Establishment,” Documents, Maidenhead Heritage Centre and ATA Exhibition and Archive, last accessed February 3, 2023, <https://archive.atamuseum.org/documents.php>.

⁹³ Merry, *Women Military Pilots of World War II*, 111-13; Moggridge, *Spitfire Girl*, 97-100; Whittell, *Spitfire Women of World War II*, 24-26, 223-224.

⁹⁴ Whittell, *Spitfire Women of World War II*, 25.

⁹⁵ *Ibid.*, 25, 192-193, 194; Ellis, *The Female Few*, ed. Jacky Hyams, 121; Hyams, ed. *The Female Few*, 20-21; Rose, *The Female Few*, ed. Jacky Hyams, 96.

were doing in the air, you'd be the danger. Yes, others like me found themselves in exactly the same situation when someone they knew well died. But we never really talked about it.⁹⁶

While the act of burying their emotions and powering through traumatic events was a debilitating factor towards their mental health, it cannot be denied that it was perhaps a necessary evil to accept. British women's suppression of fear and sadness in the ATA was something that helped them to maintain a stoic appearance with the British "stiff upper lip" in the face of tragedy that would have easily affected other pilots; they knew to focus on the present and not on the past.

All good things unfortunately came to an end for the ATA women pilots as they, and even Gower, knew that their official activities were allowed for only a limited time. It was determined by a Chicago conference of fifty-four nations that a "brave new world of international air travel" would be established from the ashes of Nazi Germany and Japan's air routes for a new aerial frontier in 1944.⁹⁷ The anticipated result from this was an overabundance of military and veteran pilots looking for work in these new airlines and routes, so much so that things looked grim for the future of the Women's Section. By June 1945 the BOAC planned to dissolve the Women's Section because the winddown of the war caused the ATA organization to shrink in prominence. Little ferry work came in, and so the ATA reverted to two pools at White Waltham and Whitchurch until it reduced to the one pool only at White Waltham.

However many women who stayed within the ATA during this time felt the sluggish work impede their chances to stick within the organization and make a wage from it. November 30, 1945, marked the end for the "ATAgirls" as the remaining

⁹⁶ Ellis, *The Female Few*, ed. Jacky Hyams, 131.

⁹⁷ Whittell, *Spitfire Women of World War II*, 265-266.

members of the Women's Section retired from the organization.⁹⁸ In terms of recognition, Gower and Margot Gore were both promptly awarded the title of M.B.E. (Member of the Order of the British Empire) for their efforts as commanders of the two Women's Section ferry pools. Meanwhile, only two women, Ruth Helen Kerly and Maureen Elizabeth Shiel, were awarded Certificates of Commendation out of the 207 pilots in the Women's Section.⁹⁹ Unfortunately, the fourteen women pilots who died in service of the ATA were not offered any post-humous awards. The rest of the women were not offered any proper recognition for their efforts since they were employed under a civilian organization, but the end of the war was not the end for some of these pilots' aviation careers.

⁹⁸ Ward, "Women in Britain," 565; Merry, *Women Military Pilots of World War II*, 123-124; Schrader, "Winged Auxiliaries," 198; Whittell, *Spitfire Women of World War II*, 265-272.

⁹⁹ D'Erlanger, "Certificates of Commendation," Documents, Maidenhead Heritage Centre and ATA Exhibition and Archive, last accessed February 3, 2023, <https://archive.atamuseum.org/documents.php>; Merry, *Women Military Pilots of World War II*, 125; "Personnel Database," Online Archive, Air Transport Auxiliary Museum & Archive at Maidenhead Heritage Centre, accessed February 3, 2023, <https://atamuseum.org/personnel-database/>.

II: SOVIET WOMEN FLY FOR THE FUTURE OF MOTHERHOOD

(OCTOBER 1941)

AVIATION GROUP 122:

125TH GUARDS BOMBER AVIATION REGIMENT

586TH FIGHTER AVIATION REGIMENT

46TH GUARDS NIGHT BOMBER AVIATION REGIMENT

Unlike Great Britain, the Soviet Union readily accepted women as pilots well before World War II. While Britain and the United States relegated their women to auxiliary roles, the Soviet Union integrated women into the Red Army as combat pilots. The factor that supported this integration was because some Russian women flew military planes as early as the First World War. Princess Evgeniia Mikhailovna Shakhovskaia of the Russian Empire was the first military airwoman to serve the Russian Army as an air scout during World War I while two other women, Nadezhda Degtereva and Sofiia Alexandrovna Dolgorunaia, also flew reconnaissance missions as pilots in 1914 and 1917.¹⁰⁰ By the end of World War I, women found that they had the opportunity to attend military aviation schools thanks to the creation of the Soviet Union.¹⁰¹

While this was an impressive stride for women's rights in world history, opposition to women pilots became a prevalent issue within Russia after the Soviet Union

¹⁰⁰ Reina Pennington, *Wings, Women, & War: Soviet Airwomen in World War II Combat*. (Kansas: University Press of Kansas, 2001), 8.

¹⁰¹ *Ibid.*, 6-8.

became the first country in the world to declare legal equality for women during the interwar period. The most significant way that women received their flight training was with the popular paramilitary organization, Osoaviakhim, also known as the Society for Cooperation in Defense and Aviation-Chemical Development, which taught aviation skills to both men and women.¹⁰² Military schools and paramilitary organizations like Osoaviakhim helped women to become more involved in the sphere of aviation and trained one of the greatest female aviators in Soviet history, Major Marina Raskova.

Marina Raskova first came from humble beginnings without any inclination for aviation, but this changed for her by the age of fifteen after she suffered from a middle ear infection that caused her to shift from studying music to subjects like chemistry and engineering. This change in Raskova's academic path led her to believe that a career in science provided better opportunities for herself as opposed to a career in music. Raskova later mastered air navigation and became the first woman to achieve a professional air navigator diploma in the Soviet Union.¹⁰³ These new opportunities launched Raskova deeper into the world of aviation after she became an air instructor to teach military navigation to Soviet soldiers at N. Ye. Zhukovsky Air Force Engineering Academy in Moscow. Furthermore, Raskova later went on to break a series of women's aviation records, working as a navigator alongside fellow record-breaking women pilots like Polina Osipenko, Vera Lomako, and Valentina Grizodubova during the 1930s.¹⁰⁴

The significance of these accomplishments was prevalent after the Soviet premier, Joseph Stalin, awarded the Order of Lenin to Raskova and her colleagues for their skills

¹⁰² Ibid., 8-11.

¹⁰³ Lois K. Merry, *Women Military Pilots of World War II: A History with Biographies of American, British, Russian and Germany Aviators* (North Carolina: McFarland & Company, Inc., 2011), 14.

¹⁰⁴ Ibid.; Pennington, *Wings, Women, & War*, 13.

as pilots. Stalin, who was fixated on aviation as a military field and held it in high prestige, publicly supported their famous record-breaking *Rodina* flight on September 24, 1938.¹⁰⁵ Raskova, Osipenko, and Grizodubova flew to the Far East in an ANT-37, a converted long range bomber nicknamed the *Rodina* (motherland), but the mission was aborted mid-operation after bad weather masked visibility in the air with no working radio communication. The *Rodina* soon lost all fuel over a Siberian swampy forested area and took a nosedive where Raskova, stationed within the nose of the bomber, was ordered to parachute out to avoid a fatality as Osipenko and Grizodubova crash landed the bomber. It took Raskova nine days with serious leg injuries from the parachute jump to travel through the forest and find the *Rodina*'s crash site with Osipenko and Grizodubova still alive and waiting for her by the bomber. The women were rescued the next day and conducted a long journey back to Moscow on foot while Raskova was carried in a stretcher due to her injuries. What should have been considered a failed mission within the Soviet Union propelled Raskova into fame among young women as she, Osipenko, and Grizodubova were the first women to receive the Hero of the Soviet Union award.¹⁰⁶

At the onset of World War II in 1939, and later Nazi Germany's invasion into the Soviet Union with a massive force of 3.6 million troops on June 22, 1941, a great number of Soviet women dashed to apply for the military's air force and serve in the frontlines at their government's behest. The reasons varied for each applicant to volunteer for the

¹⁰⁵ Zoya Malkova, "586th Fighter Regiment," in *A Dance with Death: Soviet Airwomen in World War II*, ed. Anne Noggle (College Station: Texas A&M University Press, 1994), 217.

¹⁰⁶ Merry, *Women Military Pilots of World War II*, 14-15; Pennington, *Wings, Women, & War*, 13-17; Amy Goodpaster Strebe, *Flying for Her Country: The American and Soviet Women Military Pilots of World War II* (Westport: Praeger Security International, 2007), 16-17.

front, but three reasons were particularly evident among Soviet women. First, they were fixated on flying like many Allied airwomen and wartime would not keep them from their love of flying. Second, fervent patriotism throughout the Soviet state demanded that all available hands volunteer to save the motherland from the invasion of Nazi fascism. And third, the deaths of their family and friends at the hands of the Germans caused an overall feeling of hatred towards them and a desire for revenge.¹⁰⁷

Senior Lieutenant Nadezhda Popova of the 46th Guards Night Bomber Aviation Regiment recalled the carnage of the German invasion that sent her to serve in the frontlines: “I saw the German aircraft flying along our roads filled with people who were leaving their homes, firing at them with their machine guns. Seeing this gave me feelings inside that made me want to fight them. . . They blasted our school, and it was like a terrible storm had invaded our country. The war changed our lives forever.”¹⁰⁸ Senior Lieutenant Yevghenia Zhigulenko, another pilot of the 46th, also experienced a similar traumatic event in Moscow during the early months of the invasion:

We were quite cheerful, playing all sorts of practical jokes. . . . Sure, it was war, but we were just kids, only seventeen, eighteen years old. Here we were digging [trenches], and suddenly someone yelled, “Hit the dirt!” I and my friend Tanya fell to the bottom of the trench. . . . The planes flew by, and I raised myself and looked around. Tanya was still lying there, and she had blood oozing from her temple. Understand, we had just been conversing, laughing, discussing this, planning that, and suddenly—she is no more. Suddenly this human being ceased to exist! At that moment, I understood finally what war was.¹⁰⁹

Popova and Zhigulenko’s experiences with the German Luftwaffe attacks shows that

¹⁰⁷ *The Battle of Russia*, directed by Frank Capra and Anatole Litvak (1943; Renton, WA: TOPICS Entertainment, Inc., 2008), DVD; Mariya Dolina, “125th Guards Bomber Regiment,” in *A Dance with Death*, ed. Anne Noggle, 119; Strebe, *Flying for Her Country*, 23; Amy Goodpaster Strebe, “Airwomen of the Red Star,” in *Flight Journal* 11, no. 2 (2006): 30.

¹⁰⁸ Nadezhda Popova, “46th Guards Bomber Regiment,” in *A Dance with Death*, ed. Anne Noggle, 80.

¹⁰⁹ Yevghenia Andreyevna Zhigulenko, “The Fronts,” *Remembering War: A U.S.-Soviet Dialogue*, eds. Helene Keyssar and Vladimir Pozner (New York: Oxford University Press, 1990), 39.

Soviet women exhibited a stronger sense of patriotism and vengeance than British and American women. Unfortunately, Soviet military recruiters at the time outright refused many of these female applicants because they were deemed as unnecessary.¹¹⁰

This perhaps came off as another example of gender barred entry into the military that fit the nature of the mid-twentieth century, but the reality of the situation was that the Soviet Union had too many pilots at the ready with no operational aircraft to fly. Stalin's purges against his political opponents during the 1930s was also cited as one of the largest contributing factors to this lack of aircraft and it crippled the modernization of Soviet aviation until 1941, even though the USSR had the largest air force in Europe by 1938. The result led to obsolete aircraft that created many technical issues on a massive scale, which in turn played a part in the refusal of the mass influx of women applicants.¹¹¹

Furthermore, Stalin's purges in the 1930s impeded modernization in a great number of fields and areas, but the damage incurred on the development of Soviet aircraft is one of the more interesting factors worth exploring in this context. By the time the purges ended, there was almost only one Soviet aircraft designer who was left intact by Stalin's witch hunt and that was Alexander Yakovlev, the designer of the Yak-1 fighter. Yakovlev was one of the lucky few to survive due to his own initiative and his close relationship with Stalin. Moreover, it is highly likely that Yakovlev was the one responsible for the misfortune that fell on Soviet aviation as he informed on many Soviet aircraft designers at the time. This theory within the historiography is mostly believable because of Yakovlev's infamous uncooperative behavior and fear of competition, which

¹¹⁰ Merry, *Women Military Pilots of World War II*, 34; Pennington. *Wings, Women, & War*, 21-22.

¹¹¹ Thomas W. Zeiler, *Annihilation: A Global Military History of World War II* (Oxford: Oxford University Press, Inc., 2011), 21-22, 60-61, 137-138.

was well-recorded.¹¹² Put simply, Yakovlev sold out his colleagues before any of them produced their new designs and this left him as the leading designer in Soviet aircraft production with his Yak-1 fighter design. While Yakovlev's actions left him as practically the only aircraft designer at the time, the Soviet Union needed many more than one type of fighter aircraft to resist an incoming German invasion.

The last factor that influenced the refusal of women volunteers was Germany's initial attack against Soviet airfields that began their invasion, designated as Operation Barbarossa. By the time Germany invaded Russia, the German Luftwaffe already gained the advantage in the air by crippling the Soviet Union's supply of grounded airplanes with surprise attack runs over Soviet airfields. This German invasion forced the Soviets to divert the remaining few functional aircraft in their possession towards essential aviation units, leaving little to train new pilots.¹¹³

Soviet women, however, were not willing to give up on their mission to become military pilots and they looked towards Raskova as a famous Soviet pilot to answer their pleas. Raskova, due to her celebrity status from the 1938 *Rodina* flight, received many letters from women who begged her to aid them with their integration into military aviation roles. In this sense, Raskova felt obligated to establish women in wartime aviation roles because she understood the significance of a strong united Soviet defense against the German invasion. Unfortunately, it took her months of persuading the Soviet Defense Ministry before she was able to meet with Stalin to discuss the matter.¹¹⁴ Stalin explained to her by this point that future generations of Soviets would not forgive him or

¹¹² Vinogradova, *Defending the Motherland*, 80-81.

¹¹³ Merry, *Women Military Pilots of World War II*, 110.

¹¹⁴ *Ibid.*, 24; Pennington, *Wings, Women, & War*, 22-23.

the government for “sacrificing young girls” in a time of great war.¹¹⁵ Zhigulenko later recalled Raskova’s reaction to this explanation:

She said to Stalin, “You know, they are running away to the front all the same, they are taking things into their own hands, and it will be worse, you understand, if they steal airplanes to go.” . . . And we had just such an incident. There were several girls who had asked to go to the front, and they were turned down. So they stole a fighter plane and flew off to fight. They just couldn’t wait.¹¹⁶

There is little evidence that describes how Raskova managed to convince Stalin to approve her program, but it seemed likely that her friendship and prior experience with Stalin and the *Rodina* flight influenced the militarization of women pilots and her appointment as commander of three regiments with Aviation Group 122.¹¹⁷ Furthermore, there is also no definite reason why, aside from Raskova’s influence, Stalin approved the movement for women’s integration into the Red Army’s air force (VVS). The subject has recently been speculated by Soviet and military historians. Some theorized that Stalin allowed it because of a shortage of male pilots while others suspected it as an act of propaganda, but this was recently disproved by Soviet historian Reina Pennington and military historian Thomas Zeiler. It appears that the most credible theory is that the integration of women into the VVS was attributed to Raskova’s persistence and her connections to Stalin.¹¹⁸ A possible explanation for this theory is that Stalin took Raskova’s warning about women stealing aircraft seriously and wanted to prevent the

¹¹⁵ Pennington, *Wings, Women, & War*, 26; Strebe, *Flying for Her Country*, 18.

¹¹⁶ Zhigulenko, “The Fronts,” *Remembering War*, eds. Helene Keyssar and Vladimir Pozner, 39-40.

¹¹⁷ Merry, *Women Military Pilots of World War II*, 24; Pennington, *Wings, Women, & War*, 23, 26-27, 31.

¹¹⁸ Strebe, *Flying for Her Country*, 18; The theory that the Soviet Union had a shortage of male pilots in the air force was disproved by Reina Pennington in *Wings, Women, & War* and Thomas Zeiler’s *Annihilation*, both of which emphasized how there was a shortage of Soviet aircraft rather than male pilots.

theft of necessary resources needed for the war effort.¹¹⁹ Perhaps Stalin realized that the best solution under a critical time of material necessity was to welcome women volunteers into an official military capacity and provide them with some aircraft to satiate their need to volunteer.

The People's Commissariat of Defense officially established Raskova's authority over the creation of Aviation Group 122 with Order No. 0099 on October 8, 1941. Aviation Group 122 was originally formed as a single group of highly qualified women to pilot fighter planes and assist in the VVS. It was only due to the large sum of volunteers that Aviation Group 122 quickly changed to consist of three regiments within the VVS: the 586th Fighter Aviation Regiment, 587th Short-Range Bomber Aviation Regiment (later the 125th Guards Bomber Aviation Regiment), and the 588th Night Bomber Aviation Regiment (later the 46th Guards Night Bomber Regiment).¹²⁰ It is crucial to note that the regiments within Aviation Group 122 were not referred as women units like the American WAFS and WASP or the British Women's Section in the ATA, they were instead outfitted with the same military designations as male regiments.¹²¹

This exception in designation between the three Allied women's aviation groups was most likely attributed to how the Soviet Union often advertised its public image of equality for all genders; Stalin's government had to ensure that the Soviets' grand achievement reflected upon both societal and militaristic spheres, even if Aviation Group 122 was not publicized. The regiments were initially intended to consist of women only,

¹¹⁹ Mariya Kuznetsova, "586th Fighter Regiment," in *A Dance with Death*, ed. Anne Noggle, 168; Yevgeniya Gurulyeva-Smirnova, "125th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 111.

¹²⁰ Merry, *Women Military Pilots of World War II*, 8, 24; Pennington, *Wings, Women, & War*, 22; Lyuba Vinogradova, *Defending the Motherland: The Soviet Women Who Fought Hitler's Aces* (New York: MacLehose Press, 2015), 31-32.

¹²¹ Pennington, *Wings, Women, & War*, 2.

but the structure soon changed to appoint male personnel along with the women in the 586th and 125th regiments once they were sent out to the field. Out of the 728 personnel that comprised Aviation Group 122, 205, or 28.16 percent, were men who were mostly assigned as mechanics, armorers, and engineers; very few were staff or political officers and even less were pilots that flew with the women.¹²² Only the 46th Guards Night Bomber Regiment remained entirely comprised of women throughout the war and it was one of the reasons they were given the antagonistic nickname *die Nachthexen* (the Night Witches) by the Germans after they recognized the 46th's plywood biplanes during bombing runs.¹²³

Order No. 0099 laid out a schedule to form and train the regiments for combat duty by December 1, 1941, and it listed the limited types of aircraft each regiment flew during the war. The 586th were assigned Yak-1, 7b, and 9² fighters while the 125th were assigned the brand new and complex Petlyakov Pe-2 bombers, despite the fact that they trained with the SU-2 bomber, and the 46th were assigned fragile wooden U-2 biplanes for their nightly bombing runs (the U-2's were later called Po-2s with an updated design by 1943 to honor the death of the aircraft's designer, Nikolai Polikarpov).¹²⁴ This was a stark comparison to numerous aircraft flown by the British ATA and American WASP solely because the VVS severely lacked a large number and variety of planes, as mentioned earlier, for Aviation Group 122 to pilot by 1941.

¹²² Ibid., 177-193.

¹²³ Strebe, "Airwomen of the Red Star," 24; Zhigulenko, "The Fronts," *Remembering War*, eds. Helene Keyssar and Vladimir Pozner, 41.

¹²⁴ Pennington, *Wings, Women, & War*, 48, 72, 90, 104; Nina Raspopova, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 23; Vinogradova, *Defending the Motherland*, 99; Zhigulenko, "The Fronts," *Remembering War*, eds. Helene Keyssar and Vladimir Pozner, 41.

Before Germany's invasion, Hitler, the German Wehrmacht, and the Luftwaffe built their forces well in advance to strike the Soviet Union by encroaching upon Soviet territory in Yugoslavia, Ukraine, and the Soviet's portion of Poland.¹²⁵ Stalin, however, was not prepared to meet the Wehrmacht as his government suffered from the aftermath of the purges. Stalin's response, as well as the Red Army's, was confusing. As Thomas Zeiler points out in *Annihilation: A Global Military History of World War II*:

[Stalin] downplayed the German threat and continued his long-standing appeasement of Hitler with more trade and other concessions to buy time for military preparedness. The Red Army also erred. Intelligence did not monitor Wehrmacht deployments despite Anglo-American advice gleaned from Polish information. . . . The Soviet General Staff, moreover, did not believe that the Wehrmacht could deploy in less than two weeks. So, the Russians would have plenty of time to respond. But the climate of fear Stalin had created paralyzed the military and intelligence services, causing this colossus to stumble badly in practice.¹²⁶

Stalin's "climate of fear" certainly made its mark on Soviet aviation. Many Soviet air commanders were left twisting in the wind after the Germans bombed around 5,000 Soviet aircraft in the first six days of the invasion. Numerous aircraft made easy pickings for the Germans as they destroyed aircraft that were openly lined up in rows at the airfields and achieved early air superiority in the invasion.¹²⁷ Essentially, the Red Army's fearful command structure, given strict orders from Stalin not to provoke the Germans, left their defenses wide open and primed for a devastating blow to an already weakened air force. The significance and proximity of time between Stalin's purges and Operation Barbarossa's initiation offer the conclusive explanation as to why Soviet aviation was left

¹²⁵ *The Battle of Russia*, directed by Frank Capra and Anatole Litvak (1943; Renton, WA: TOPICS Entertainment, Inc., 2008), DVD.

¹²⁶ Zeiler, *Annihilation*, 136.

¹²⁷ *Ibid.*, 137-138; Merry, *Women Military Pilots of World War II*, 110; Vinogradova, *Defending the Motherland*, 32, 122-123.

in the poor state it was and how it affected Aviation Group 122's deployment by late 1941. Nevertheless, the limited availability and variety of aircraft did not seem to affect the determination of Soviet airwomen within the 122nd; in fact, it encouraged the volunteers to embrace a competitive field for the honor of serving their country and getting revenge.

Order No. 0099 specified for VVS high command to recruit women from military and civil air fleets, upper-level universities, and Osoaviakhim into a range of military aviation roles like navigators, general support, mechanics, armorers, and pilots.¹²⁸ Osoaviakhim was the most common facet for the recruitment selection process since the paramilitary organization offered most Soviet women flight training and preparations for active or reserve military service. Moreover, Osoaviakhim was the most logical choice for the VVS to focus the recruitment process since the Soviet government encouraged women to attend the organization for flight training during the Soviet Union's "Golden Age of Aviation" in the 1930s.¹²⁹ The VVS spread the news of recruitment through word of mouth to women and assigned fighter aircraft to regiments with the help of the Komsomol (the Communist Union of Youth). Some personal accounts stated that word of mouth depended on women having connections with certain Communist Party staff, friends, or family to receive the news of Raskova's unit. This same method was equally evident in Britain and the U.S. at the time they began their recruitment process, which speaks volumes to the effort Allied governments took to recruit women pilots.¹³⁰

Meanwhile in Moscow, Raskova took it upon herself personally to interview all

¹²⁸ Pennington, *Wings, Women, & War*, 31, 48.

¹²⁹ Strebe, *Flying for Her Country*, 21, 22.

¹³⁰ Vinogradova, *Defending the Motherland*, 69-70.

the women volunteers and assign them positions during Germany's invasion.¹³¹ Many of these volunteers recalled that Raskova asked for their qualifications in flight hours and what positions they hoped to fill. Once the interview process was over, Raskova assigned the volunteers to roles based on necessity within the regiment and where she deemed their skills most useful. Many, if not all the volunteers, were determined to fulfill roles as combat pilots, which left Raskova in a slight predicament regarding how to assign positions to the women. There was no choice in the matter but to assign many of the volunteers as navigators, mechanics, and technicians since the 122nd desperately needed them over pilots. However, Raskova was empathetic to anyone who voiced their displeasure over their assignments and she fostered their hopes to fly as combat pilots over time.¹³² Raskova's encouragement renewed the determined spirits of many women who did not get the chance to become pilots throughout the early years of the war.

While Raskova's interviews were usually short, in some cases she took the time to warn volunteers about the dangers of fighting on the front. Irina Sebrova, a pilot and wing commander in the 46th, noted the significance of the warning from Raskova's interview process, "Raskova had a talk with us individually. She told us to think twice before going to the front because it was a very severe thing to do. None could be persuaded not to go, and we all joined the regiment."¹³³ Matryona Yurodjeva-Samsonova, A mechanic of the 46th, corroborated Sebrova's notes on Raskova's caution, "I asked to join the regiment and she took me, but I had to ask several times before she agreed. By that time I was studying in the aviation technical college, I was a second-year student. I

¹³¹ Pennington, *Wings, Women, & War*, 31.

¹³² Vinogradova, *Defending the Motherland*, 66.

¹³³ Irina Sebrova, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 74.

was eighteen when the war started.”¹³⁴ This frequent denial from Raskova revealed that she sought volunteers who recognized danger and were determined to serve the motherland. Perhaps Stalin’s early warning about “sacrificing young girls” might have subconsciously influenced Raskova and explained some of the rejections for younger female volunteers.¹³⁵

Once the interview process was completed, a thousand volunteers were selected to join Aviation Group 122 for aviation, military, and technical training in Moscow. The volunteers were mainly university students in their late teens and early twenties; others were instructor pilots, air show pilots, civil aviation pilots, and pilots who were from the VVS or Osoaviakhim.¹³⁶ Unfortunately, the training was put on hold early due to the encroaching German invasion on October 15, 1941, which resulted in the evacuation of 150,000 refugees, including the 122nd, from Moscow. Raskova’s regiments were transferred to Engels, a city on the Volga River located 500 miles southeast from Moscow, where they arrived at a large aviation school on October 25 to resume training for the volunteers.¹³⁷ This was evidently a benefit to the 122nd’s training in the long run as Engels had geographical advantages aside from the distance to Moscow. For one, Engels was surrounded by a dry steppe that was immensely flat with no geographical obstacles, making it the perfect area for trainees to land wherever they could. Another advantage was Engels’ proximity to the Volga River during the winter, as the large river made another perfect runway like the dry steppe when it was completely frozen over.¹³⁸

¹³⁴ Matryona Yurodjeva-Samsonova, “46th Guards Bomber Regiment,” in *A Dance with Death*, ed. Anne Noggle, 78.

¹³⁵ Merry, *Women Military Pilots of World War II*, 36; Pennington, *Wings, Women, & War*, 38.

¹³⁶ Reina Pennington, “Not Just Night Witches,” in *AIR FORCE Magazine* 97, no. 10 (2014): 59-60.

¹³⁷ Merry, *Women Military Pilots of World War II*, 55; Pennington, *Wings, Women, & War*, 39-40.

¹³⁸ Vinogradova, *Defending the Motherland*, 63.

The geographical advantage, however, was only one part that aided the trainees in their vigorous training program with the VVS.

Unlike the British ATA and American WASP, Soviet airwomen underwent the same strict military training and education as men to prepare for combat in the front.¹³⁹ The training itself was originally designed to take three years, but Raskova redesigned and directed the training to be completed within six months due to the immediacy of the war. For their education, many Soviet airwomen were taught military theory, armament, and other military subjects that expanded on navigation, firearms, and equipment maintenance training. Those who did not have any navigator or technical backgrounds from colleges or universities focused on honing those skills to fulfill their designated roles as navigators, mechanics, and technicians.¹⁴⁰

As for their physical training, the volunteers were required to fly in the U-2, an open-cockpit biplane made entirely of plywood, to practice air tactics, fly in loops, and fly in formation for defense purposes. Trainees in the 46th arguably had the more rigorous training regimen in the 122nd as they followed specific training routes at night while performing nightly bomber practice over parade grounds.¹⁴¹ As the training expanded into early 1942, trainees in the 586th were granted access to perform solo training flights with fighter planes in “the zone,” a designated airspace for pilots who waited to land or approach an airfield. It was at this point that the trainees practiced engaging in aerobatics and simulating dogfights which gave them invaluable combat

¹³⁹ Pennington, *Wings, Women, & War*, 43.

¹⁴⁰ Merry, *Women Military Pilots of World War II*, 55-57; Pennington, *Wings, Women, & War*, 42-44; Vinogradova, *Defending the Motherland*, 76, 93.

¹⁴¹ Vinogradova, *Defending the Motherland*, 106.

experience before their deployment into the field.¹⁴² Soviet women were persistent with their training despite its rigorous and intense structure on the volunteers because they were determined to win the war, even if it was at the expense of their own health.

All training, as mentioned before, was designed and directed by Raskova as a condition of her formation of Aviation Group 122 and she proved to be a demanding leader. In one instance where Raskova typically sounded an alarm drill in the middle of the night, she “discovered some girls had cheated by donning coats over their nightshirts, [Raskova] made them march around the airfield with the cold wind blowing on their bare legs.”¹⁴³ Military discipline like this was emphasized as one of the most important aspects in the 122nd’s training because the trainees needed to understand what to expect with life on the front. The few volunteers who actively refused to learn military discipline by ignoring orders were subsequently thrown out of the regiment and reassigned to civilian roles in wartime production or office work.¹⁴⁴

Raskova’s strict command and the shortened deadline for training meant that Soviet airwomen were forced to take ten courses daily followed by two hours of drill and with only five to six hours of sleep.¹⁴⁵ However, Raskova was not only the teacher at Engels, she also studied many subjects and took exams with the other women to improve her capabilities as a commander.¹⁴⁶ Analyzing the training of Aviation Group 122 puts into comparison what Britain and the U.S. expected from their women volunteers. The difference with the Soviet Union was due in part to their equal gender opportunities that

¹⁴² Ibid., 111-112.

¹⁴³ Pennington, *Wings, Women, & War*, 42.

¹⁴⁴ Vinogradova, *Defending the Motherland*, 75, 104-105.

¹⁴⁵ Nataliya Alfyorova, “125th Guards Bomber Regiment,” in *A Dance with Death*, ed. Anne Noggle, 131; Strebe, *Flying for Her Country*, 24.

¹⁴⁶ Pennington, *Wings, Women, & War*, 44.

allowed women to have an active role in paramilitary organizations. More importantly, the determination of Soviet airwomen to fight in the front is what motivated them to complete a rigorous training program that many of the volunteers could not fully absorb in the short time they had for training.

Raskova and her staff settled on the command structure for Aviation Group 122's regiments during the women's flight training at Engels on January 25, 1942. Finding the right commanders capable of leading the three regiments was a tough and strenuous process towards the end of the discussion, but Raskova and her staff assigned three women with the most military experience to command each regiment. Raskova herself took command of the 125th Guards Bomber Aviation Regiment, Major Yevdokiya Bershanskaya was given command of the 46th Guards Night Bomber Aviation Regiment, and Major Tamara Kazarinova was assigned as the 586th Fighter Aviation Regiment's commander.¹⁴⁷

Raskova was the first to appoint herself as commander of the 125th regiment in the initial command structure discussion, but there is not much indication as to why she placed herself in the role. It seemed that she always planned to participate actively in the war given how she extensively trained with the Pe-2 dive bomber while the rest of the volunteers were training at Engels.¹⁴⁸ Raskova's reasoning is most likely because she could not stand the thought of sitting safe in an office at Engels while her women were out fighting the war; Raskova always believed in having an equal status with the volunteers after all.¹⁴⁹ Regardless of her intentions, Raskova excelled as commander of

¹⁴⁷ Anne Noggle, ed. *A Dance with Death*, 17; Pennington, *Wings, Women, & War*, 47-48.

¹⁴⁸ Merry, *Women Military Pilots of World War II*, 109.

¹⁴⁹ Pennington, *Wings, Women, & War*, 42.

the regiment and used her influence to secure new Pe-2s for the 125th for a short few months before she died in a plane crash on January 4, 1943. Raskova's death was the result of bad weather which prevented her regiment's dispatch to the Stalingrad front; she later took off with a crew of three aircraft to Stalingrad once the weather finally cleared. Unexpectedly, Raskova got caught in a sudden heavy snowstorm and dense fog that caused her to lose control of her aircraft and crash to her death.¹⁵⁰ Raskova's death signaled a period of anxiety for the volunteers over the possibility of the 122nd's dissolution, but the concern slowly quelled after Major Valentin Markov was appointed the new commander of the 125th by order of the VVS. Despite the initial apprehension from both Markov and the women pilots about his leading the regiment, Markov's leadership skills allowed him to organize and lead the regiment efficiently throughout the rest of the war with the support of the pilots.¹⁵¹

Following Raskova's self-appointment, Major Yevdokiya Bershanskaya's became the commander of the famous all-female 46th regiment. There was much debate over Bershanskaya's qualifications to lead a regiment from Major Kazarinova who claimed that she lacked any combat experience. Raskova, however, asserted that Bershanskaya was the best volunteer to lead the night bombers because she was an experienced instructor and had prior experience in civil aviation. Bershanskaya outright refused the appointment at first because she wanted to fly as a fighter pilot, and she continued to refuse the appointment for several days until she was eventually persuaded to become

¹⁵⁰ Noggle, ed. *A Dance with Death*, 17; Strebe, *Flying for Her Country*, 25; Vinogradova, *Defending the Motherland*, 100-101.

¹⁵¹ Kristal L.M. Alfonso, *Femme Fatale: An Examination of the Role of Women in Combat and the Policy Implications for Future American Military Operations* (Montgomery, Alabama: Air University Press, 2009), 28; Valentin Markov, "125th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 101-104; Antonina Pugachova-Makarova, "125th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 126; Pennington, *Wings, Women, & War*, 95-96.

commander.¹⁵² As it turned out, Bershanskaya became an innovative leader for the 46th after she incorporated a system of flight training for pilots, navigators, and engineers to keep a consistent number of flying personnel.¹⁵³ It was thanks to her ingenuity that the 46th never had a shortage of pilots when the regiment had the worst casualties out of the 122nd. Bershanskaya was especially praised for looking after the well-being of her pilots. As Junior Lieutenant Olga Yerokhina-Averjanova, a mechanic from the 46th, wrote:

In 1943 Bershanskaya . . . selected me as a reinforcement for her regiment. It was easier to serve in the male regiment in the physical sense that the heavy duties were performed by the men. But from the point of view of human relationships, it was much better in the women's regiment. When we were on duty we called each other and members of the command and staff by their rank, very officially; and then in the mess or barracks, we called each other informally, addressing each other by our first names. This made friendships and relationships, and it was all due to Bershanskaya, our commander, because she was a marvelous person.¹⁵⁴

Overall, Bershanskaya was determined as a volunteer to fulfill her role as a commander despite her hesitation and inexperience. This determination paid off in the end as Bershanskaya became the only regimental commander out of the three leaders to maintain her leadership status throughout the war.

The 586th was the final regiment to receive a commander with the mysterious appearance of Major Tamara Kazarinova at Engels shortly after the 586th began training. Interestingly enough, Pennington claimed that Kazarinova was not Raskova's first choice as to who she wanted to lead the regiment.¹⁵⁵ Raskova's most difficult venture during the command structure selection was finding an appropriate commander for the fighter

¹⁵² Pennington, *Wings, Women, & War*, 47.

¹⁵³ *Ibid.*, 75, 165-167; Noggle, ed. *A Dance with Death*, 18; Yevghenia Zhigulenko, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 56.

¹⁵⁴ Olga Yerokhina-Averjanova, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 58-59.

¹⁵⁵ Pennington, *Wings, Women, & War*, 48.

regiment, but she did not have anyone to entrust it to at the time. Raskova only knew Kazarinova as a bureaucratic and aviation rival, and that she was “notable for [her] hardiness and determination.”¹⁵⁶ Pennington speculated that Kazarinova’s appointment as commander was possibly due to her connections that allowed her to gain the position without Raskova’s approval, or that these connections forced Kazarinova onto Raskova without choice.¹⁵⁷ Despite Kazarinova’s strange appointment, it is clear that she was determined enough to take her position as commander, but her determination was perhaps not the best fit for the 586th.

Kazarinova herself became a controversial commander during her tenure with the 586th that ran alongside a list of grievances between her and her pilots. As a leader, Kazarinova was disliked by members of the 586th because she was strict, harsh, and cold to the pilots, but it was also for the fact that she lacked military judgement in her decisions due to “personality defects.”¹⁵⁸ In fact, Kazarinova had so much animosity with the fighter pilots that there was an open revolt against her within the 586th regiment. This was a common occurrence on the front with ground units, but it was completely unheard of for an air regiment in the rear to act upon. The revolt escalated so drastically that Kazarinova used her connections with General Osipenko, commander of the anti-aircraft division, to transfer eight of her biggest enemies within the regiment to the Stalingrad front to prevent a mutiny.¹⁵⁹ This, however, was not the end of Kazarinova’s infamous leadership in the regiment until she made a fatal mistake that put the final nail in her

¹⁵⁶ Galina I. Markova, *Vzlet: o Geroe Sovetskogo Soiuzu M. M. Raskova* [Takeoff: about Hero of the Soviet Union M. M. Raskova] (Moscow: Politizdat, 1986), 86.

¹⁵⁷ Pennington, *Wings, Women, & War*, 47-48.

¹⁵⁸ *Ibid.*, 108, 165-166.

¹⁵⁹ Pennington, *Wings, Women, & War*, 107-109; Vinogradova, *Defending the Motherland*, 129, 170.

career with the 586th in late 1942.

On October 5, 1942, one of the 586th fighter pilots, Valeriia Khomiakova, returned to the airfield at Anisovka after a long and strenuous journey to and from Moscow to congratulate her for her aerial combat achievements. Upon her return, Kazarinova immediately assigned Khomiakova night alert duty despite her fatigue from the journey. On that same night Khomiakova was ordered to sleep in a dugout to get some rest, but a signal for a nearby aircraft to take off awoke her and she dashed to fly the plane in the dark while disoriented. Khomiakova's disorientation and inability to fly blindly in the darkness led her to tragically crash into an obstacle and die, which marked the death of the first female pilot who scored a kill in the 586th. As a result of this incident, Kazarinova was stripped of her position as commander because of her error in judgement and she was transferred to work in General Osipenko's staff. Kazarinova was later replaced by Major Aleksandr Gridnev, a former commander of the 82nd Fighter Aviation Regiment and an individual with a mixed past, on October 14, 1942. While Gridnev's assignment to the 586th was meant as a punishment for recent trivial actions that landed him in jail for a brief period, the female fighter pilots welcomed him as a great commander and held him in high regards; some even regarded Gridnev as the true commander of the 586th over Kazarinova.¹⁶⁰ These commanders, apart from Kazarinova's infamous command, ultimately kept Raskova's vision of women fighter pilots alive during uncertain times. Additionally, these commanders maintained the women pilots' spirit of determination to fight that made up the 122nd.

The activities for Aviation Group 122 varied for each regiment based on their

¹⁶⁰ Ibid., 186-187; Alfonso, *Femme Fatale*, 25-26; Merry, *Women Military Pilots of World War II*, 73; Pennington, *Wings, Women, & War*, 106-113.

designation and type of planes they flew. What made them different from other Allied aviation units was that Soviet airwomen were not constrained to the role of ferry pilots and had more opportunities to advance into combat roles. The 586th, with their Yak-1 fighters, served as a defense regiment that protected high priority targets from potential enemy attacks, destroyed enemy reconnaissance aircraft, escorted transported cargo, and delivered important messages from Soviet command to military units on the front.¹⁶¹ The 586th produced a sizeable defense force that “completed more than 9,000 flights, of which 4,419 were combat sorties; 38 enemy aircraft were destroyed and 42 damaged in 125 air engagements.”¹⁶² Senior Lieutenant Mariya Kuznetsova recalled her experiences as a 586th defense fighter during the Battle of Stalingrad:

They had sent four of us to the Stalingrad front to join a male fighter regiment, and there we met the enemy’s every mission. I shot down three enemy aircraft. We suffered great losses of planes and pilots at that time, and because of a shortage of aircraft I didn’t fly on every combat mission. . . Of four aircraft flying in formation, one was piloted by a woman—me.¹⁶³

The 586th never achieved Guards status like the 125th and 46th had during the war mostly because they were a defense regiment that protected the Soviet Union’s rear from the German invasion. They never faced the same level of combat as the rest of the 122nd on the front lines and the most aircraft they shot down was only ten percent of the total German aircraft destroyed during the war.¹⁶⁴ In this comparison, the 586th was better known as an efficient defense unit that supported Soviet ground troops, patrolled fixed

¹⁶¹ Tamara Pamyatnykh, “586th Fighter Regiment,” in *A Dance with Death*, ed. Anne Noggle, 160; Lavdiya Pankratova, “586th Fighter Regiment,” in *A Dance with Death*, ed. Anne Noggle, 181; Nina Slovkhotova, “586th Fighter Regiment,” in *A Dance with Death*, ed. Anne Noggle, 179-180; Raisa Surnachevskaya, “586th Fighter Regiment,” in *A Dance with Death*, ed. Anne Noggle, 187.

¹⁶² Pennington, *Wings, Women, & War*, 105.

¹⁶³ Kuznetsova, “586th Fighter Regiment,” in *A Dance with Death*, ed. Anne Noggle, 167.

¹⁶⁴ Pennington, *Wings, Women, & War*, 124, 125.

targets, and escorted important Soviet officers across cities that faced light German attacks.

Following the 586th, the 125th was the second of the three regiments and served as an offensive regiment specialized in bombing targets at the front during the day with the complex Petlyakov Pe-2, a twin-engine, twin-tail dive bomber. Markov described in detail that as a front bomber aviation regiment, the 125th was responsible for bombing targets such as troop concentrations, strong points, armament concentrations, tanks, artillery formations, airfields, railroad lines, stations, bridges, and seaports.¹⁶⁵ The regiment flew 1,134 combat missions with a total of 980,000 tons of bombs dropped throughout the war and under the careful guidance of Major Markov since he chose routes to avoid major German threats. The 125th, however, sometimes engaged with German fighters during their missions and fought back thanks to their gunner crews manning the Pe-2's light and heavy machine guns.¹⁶⁶ The women of this regiment lacked a significant reputation like the 46th for their exploits, but it did not change the fact that they persisted as combat pilots for their country's sake. The 125th demanded as many missions as they could, regardless of danger, to which they were awarded the title of "Guards" and piloted one of the most modernized, yet complex, aircraft the Soviet Union produced. Their achievements were a significant difference from flying the fragile wooden biplanes of the 46th into enemy territory.

¹⁶⁵ Markov, "125th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 104.

¹⁶⁶ Pennington, *Wings, Women, & War*, 90; Dolina, "125th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 120-121; Antonina Khokhlova Dubkova, "125th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 113-115; Antonina Pugachova-Makarova, "125th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 127.

The final regiment, the 46th, is widely known throughout aviation history as the most significant regiment of Aviation Group 122 because it was strictly an all-female combat regiment sanctioned by the USSR. Moreover, the 46th was the only Allied regiment that allowed women to fly as combatants outside of their country into Poland and Germany during the war.¹⁶⁷ With over 24,000 combat missions registered to the unit, the 46th's main objective was the nightly bombardment of German ammunition and fuel depots along with vehicle and ground troops.¹⁶⁸ Nightly bombardments were one of the relatively few advantages the 46th had since the darkness of night provided a natural camouflage for pilots who flew the light Po-2. Darkness allowed the 46th's pilots and navigators to fly at a low altitude of 1,000 meters for their bomb runs and avoid German AA guns that fired a mix of explosive, percussive, and incendiary rounds that easily ignited the plywood of the Po-2.¹⁶⁹ Although these factors caused a lot of stress for the women, it was important that they maintained their focus in the middle of a mission as "navigation in the dark . . . required a very cool head and their crews were not allowed parachutes until late in the war."¹⁷⁰

The absence of parachutes among the 46th is noteworthy of further exploration when talking about the regiment. For most of the war, it appeared evident that women pilots in the 46th did not see a use for parachutes because many of them believed that the Po-2 served as a natural parachute and that their knowledge of Soviet terrain allowed for an easier descent. Moreover, there was a common understanding between the pilots that

¹⁶⁷ Alfonso, *Femme Fatale*, 30-31; Irina Rakobolskaya, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 27-28.

¹⁶⁸ Vinogradova, *Defending the Motherland*, 18, 132; Pennington, *Wings, Women, & War*, 72; Serafima Amosova-Taranenko, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 44-45.

¹⁶⁹ Zhigulenko, "The Fronts," *Remembering War*, eds. Helene Keyssar and Vladimir Pozner, 40.

¹⁷⁰ Vinogradova, *Defending the Motherland*, 18.

they did not wish to be captured by the Germans if they were shot down because the Soviet Union detained prisoners of war for failure; the pilots preferred death over capture and eventual Soviet imprisonment. It was not until the 46th crossed over German lines and came under incendiary fire that they were ordered to wear parachutes for the remaining years of the war.¹⁷¹ It was a risky decision, but there was an advantage to flying the light biplanes without parachutes: pilots and navigators in the 46th loaded additional bombs onto their aircraft to deal extra damage during missions.¹⁷²

Flying in the 46th meant that there was a brief window for a pilot and navigator to deliver a payload over an enemy target before they were exposed to AA fire and forced to return to their airfield. This meant that a pilot and navigator took any chance they could to stock up on as many bombs as they could before takeoff, even to the point that the thinnest navigators were chosen and wrapped themselves with extra bombs to drop by hand.¹⁷³ Evidence from some of the pilots also reported how navigators got out of the cockpit mid-flight, stood on the wings of the Po-2, and manually loosened bombs that would not release from their racks. It was highly important that both pilot and navigator work well together and remain close to perform as a single unit. In fact, there was no denying how vital it was for both parties to drop their payloads over designated targets, it practically meant life or death in those instances.¹⁷⁴

Lieutenant Alexandra Semyonovna Popova shared her thoughts on the whole

¹⁷¹ Irina Rakobolskaya, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 27; Nina Raspopva, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 22-23; Pennington, *Wings, Women, & War*, 87, 101-102.

¹⁷² Nina Karasyova-Buzina, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 86; Pennington, *Wings, Women, & War*, 87.

¹⁷³ Zhigulenko, "The Fronts," *Remembering War*, eds. Helene Keyssar and Vladimir Pozner, 41.

¹⁷⁴ Rakobolskaya, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 29; Vinogradova, *Defending the Motherland*, 90.

experience of fighting in the 46th regiment: “Before there had been no weapon, except for four bomb racks under the wings— that’s all. Nowadays they’d call us kamikazes, and maybe we were kamikazes. Yes! We were! But victory was valued more than our lives. Victory!”¹⁷⁵ This tenacity to forgo life for victory helped to establish the Night Bomber’s significant reputation as the “Night Witches.” But the reality of the situation was that the determination of the women in the 46th to pilot aircraft in the war was no different from that of the 586th and 125th. These women were equal to male combat pilots in every way except for their equipment and unit status, their efforts and sacrifice collectively ensured the protection of the Soviet Union during the Great Patriotic War.

An important note worth mentioning at this point is that Aviation Group 122 was not the only group where women were seen to pilot fighters or other military aircraft throughout the war. In fact, there were quite a few Soviet airwomen who were allowed to serve in all-male aviation units at the front before the 122nd’s establishment and afterwards as well. While these women were incorporated into mixed units, whether alone or serving with a few other women, they experienced the same bonding, strength, and determination with their units as the 122nd did with each other. For example, Valentina Grizodubova, one of Raskova’s copilots in the 1938 *Rodina* flight, chose to command her own regiment with the 101st Aviation Regiment by the start of the war and she was hailed as a strict yet capable commander who flew with her pilots.¹⁷⁶ Some women from the 122nd, mostly from the 586th given its history, were even transferred out of their regiments into new units out of wartime necessity. Lilya Litvyak, the highest

¹⁷⁵ Alexandra Semyonovna Popova, “They Needed Soldiers . . .,” in *The Unwomanly Face of War: An Oral History of Women in World War II*, ed. Svetlana Alexievich, trans. Richard Pevear and Larissa Volokhonsky (New York: Random House, 2018), 194.

¹⁷⁶ Pennington, *Wings, Women, & War*, 127-128.

scoring woman to shoot down enemy aircraft during the war with fifteen confirmed kills in a single year, was formerly a part of the 586th until she was sent by Kazarinova to join the elite 9th Guards Fighter Aviation Regiment at the Stalingrad front. From then on, Litvyak never returned to the 586th and she continued to serve in mixed regiments with men as a determined and aggressive pilot until her disappearance in the middle of an air battle in August 1943 where she was never seen again.¹⁷⁷

Another example of these airwomen was Anna Timofeyeva-Yegorova, a young woman who served in the 130th Air Liaison Squadron for the Southern Front by August 1941. After the war arrived in the Soviet Union, Yegorova left her position as a flight instructor at the Kalinin aeroclub to volunteer as an Osoaviakhim pilot for the frontlines. Yegorova was then sent to an aeroclub in the industrial city of Stalino to get closer to the front, but she was unfortunately too late to join the aeroclub because she arrived at the city after it was evacuated. However, Yegorova's luck changed after she met with the 130th at the city and they brought her into their unit because they desperately needed pilots.¹⁷⁸ Yegorova's job within the 130th was mainly focused on liaison work at the Southern front, but she also conducted missions like surveying enemy positions, searching for lost units, and establishing communication between various ground units. All of these tasks were equally dangerous to missions conducted by Aviation Group 122 considering Yegorova flew in a Po-2 biplane like the 46th Night Bomber Regiment.¹⁷⁹

Soviet soldiers, including the female combat pilots from the 122nd, were paid

¹⁷⁷ Ibid., 109, 126, 141-142, 163; Strebe, *Flying for Her Country*, 27; Bill Yenne, *The White Rose of Stalingrad: The Real-Life Adventure of Lidiya Vladimirovna Litvyak, the Highest Scoring Female Air Ace of All Time* (Oxford, UK: Osprey Publishing, 2013), 24-25, 201-203, 205.

¹⁷⁸ Anna Timofeyeva-Yegorova, *Red Sky, Black Death: A Soviet Woman Pilot's Memoir of the Eastern Front*, ed. Kim Green, trans. Margarita Ponomariova and Kim Green (Bloomington, Indiana: Slavica Publishers, 2009), 66-67, 68-70.

¹⁷⁹ Ibid., 71-77, 79, 83-85, 87.

little and had most of their earnings cover the cost of uniforms, food, and furniture for army quarters.¹⁸⁰ But, the fact that Soviet women in the Red Army's air force were paid an equal sum as men from the outset of the war expressed the significant difference the Soviet Union had as opposed to Britain and the U.S. No pressure came from female units or any government officials because the Soviets knew well before the war that "women were accepted as a legitimate and necessary part of the workforce . . . Therefore no objections were raised . . . that the women who served in the Red Army's air force would be 'taking away jobs from qualified men.'"¹⁸¹

Soviet men were not too different from British and American men when they first saw or heard of a female aviator flying for the military, but they found it more amicable to work alongside women pilots thanks to the Soviet Union's equality laws from the interwar period. Their mindset and experiences towards female combat pilots were particularly evident as Major Valentin Markov indicated on his appointment as regimental commander of the 125th:

When I was told that I was to lead a female regiment, the order was like a cold shower to me—I was shocked! . . . I couldn't visualize how I could command women during war, flying bombers. I knew the aircraft and knew how difficult it was even for male pilots to fly. I couldn't imagine how women could manage it . . . After I made a lot of combat missions with this regiment I saw the attitude toward me become softer and more respectful, and by the summer of 1943 we had become real, true combat friends.¹⁸²

Markov's experience and thoughts were a common occurrence among Soviet men during the Great Patriotic War as they were initially doubtful about the skills of Soviet airwomen. There were even issues where men perceived that working under a female

¹⁸⁰ Merry, *Women Military Pilots of World War II*, 49.

¹⁸¹ *Ibid.*

¹⁸² Markov, "125th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 102-103.

commander or in a women's regiment was an emasculating position. Major Irina Rakobolskaya, a navigator in the 46th, recalled one such event where a man was assigned to the 46th regiment for a month to install air-to-ground communications. She remembered that this man "was very shy and quiet and even ate by himself. At one time he was supplied with female underwear, [possibly by mistake,] because his surname was one whose ending could be either male or female. On that day he said that not one single day would he remain after he finished with the installation!"¹⁸³ Despite this, many men who held doubts about Soviet airwomen soon changed their perspectives after witnessing their flying capabilities; men who flew with the female units were the quickest to adjust themselves overall.¹⁸⁴

A noteworthy point that came from these interactions was that gender was of no importance when compared to the urgency of war. Gender roles were only changed slightly at the time based on how men perceived Soviet airwomen skills and how they fought in combat with them, but the women were desperate to maintain their traditional gender roles in a brutal conflict.¹⁸⁵ For one, a lot of women that volunteered for Raskova's unit were required to cut a lot of their hair off because it got in the way of practical training. Many of the women were unfazed because they understood that it was a requirement, but a few others were devastated to lose so much of their hair; they believed they sacrificed their femininity along with it.¹⁸⁶

¹⁸³ Rakobolskaya, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 30.

¹⁸⁴ Merry, *Women Military Pilots of World War II*, 68-69; Pennington, *Wings, Women, & War*, 114, 162-165.

¹⁸⁵ Pennington, *Wings, Women, & War*, 153.

¹⁸⁶ Vinogradova, *Defending the Motherland*, 64-65.

Additionally, there was even evidence that some Soviet airwomen embraced romantic ideals about flying for the VVS that fell into gendered stereotypes. Some Soviet women tended to apply makeup to retain their femininity, but more importantly so that they could find a man after the war. Such a case was noted by Zhigulenko as she recalled that she often applied mascara to her auburn eyelashes and used paper curlers for her long hair because she was embarrassed about her natural looks. In that same case, a serious female pilot chastised Zhigulenko for applying her makeup during the war until another pilot intervened and exclaimed: “Don’t you understand? I am fighting so that the war will end more quickly, so the sooner I can find my love.”¹⁸⁷ Some of the women in other instances were even prone to falling for romantic fantasies of removing their helmets and revealing their gorgeous looks to groups of men, hoping one of the men would instantly fall in love with them.¹⁸⁸

Overall, there were no concerns over Soviet airwomen challenging gender norms at the time when they were so persistent in maintaining those norms themselves. After all, femininity and motherhood were some of the vital traditions ingrained in Soviet culture by the mid-twentieth century. Zhigulenko especially reflected this belief in traditional roles years later with her interview in *Remembering War*:

You see, for a man the important things are courage, heroism, [and] being tough. But a woman is motivated by the feeling of motherhood. I am sure of this. Nature made woman this way. The desire to save one’s future children was what apparently moved me and all the women who left the universities to serve in aviation.¹⁸⁹

¹⁸⁷ Zhigulenko, “The Fronts,” *Remembering War*, eds. Helene Keyssar and Vladimir Pozner, 43.

¹⁸⁸ *Ibid.*

¹⁸⁹ *Ibid.*, 45.

Despite their beliefs in traditional gender roles, Aviation Group 122's contributions to the war effort were well recognized by Soviet soldiers and Red Army officers which in turn led them to leave a remarkable impact on history. Unfortunately, the 122nd, and many of the female pilots who were integrated into male units, were officially demobilized from the military by the Soviet government shortly after Germany's surrender in May 1945; only a handful of female units remained active until February 1947. Demobilization occurred for these women because the Soviet Union reaffirmed its pro-natalist and cultural perspective on women as wives and mothers once the war finally wound down. Additionally, the Soviets also demobilized women from the military so they could replace civilian sector workers who were lost as wartime casualties. While many of the Soviet airwomen lost their opportunities to pilot aircraft, the solace they took from this was that they returned to Russia and repaired their lives because of their dedication to the Soviet state.¹⁹⁰ So, while the creation of Aviation Group 122 was a historical and monumental steppingstone for women's integration in military aviation, it was an unintentional steppingstone to say the least since it was created out of Soviet nationalism, ideology, and revenge.

¹⁹⁰ Pennington, *Wings, Women, & War*, 143-145, 153-157.

III: THE WAFS AND WASP STRUGGLE ON A TIGHTROPE

(SEPTEMBER 1942; AUGUST 1943)

WOMEN'S AUXILIARY FERRYING SQUADRON

WOMEN'S FLYING TRAINING DETACHMENT

WOMEN AIRFORCE SERVICE PILOTS

Aviation established an impactful trend within the U.S. for upper class Americans, but it was also a male-centric trend that did not incorporate many women. The cause of this originated from America's gender-biased culture that viewed women as too fragile for the vocation. One out of five women pilots at most found jobs as flight instructors, aerial photographers, fixed-base operators, weather informers, or plane saleswomen. It was only by mid-1929 that 117 upper class American women acquired a pilots' license which barely put them in the one percent of total licenses issued.¹⁹¹ Fortunately enough, Amelia Earhart, known for her achievement as the first woman to fly across the Atlantic, was one of the few upper-class women who changed this perspective. She proclaimed that there was a future for women in aviation because the modernization era in the twentieth century introduced new technologies and a stronger role for

¹⁹¹ Katherine Sharp Landdeck, *The Women with Silver Wings: The Inspiring True Story of the Women Airforce Service Pilots of World War II* (New York: Crown Publishing, 2021), 17, 20-21; Sarah Byrn Rickman, *Betty Gillies, WAFS Pilot: The Days and Flights of a World War II Squadron Leader* (Colorado Springs: Flight to Destiny Press, 2020), 8, 10.

women.¹⁹²

Earhart made new opportunities for American women pilots with her record-breaking flights, her role as the first president of the first all-female pilots' organization that represented its ninety-nine charter members, the Ninety-Nines, and her magazine articles and public speeches that promoted female integration into aviation.¹⁹³ Her goals for the growth of female pilots into the modern world were encapsulated in her 1935 public radio broadcast speech:

Although women as yet have not taken full advantage of its use and benefits, air travel is as available to them as to men. As so often happens in introducing the new or changing the old, public acceptance depends particularly upon women's friendly attitude . . . And lastly, there is a place within the industry itself, for women who work. While still greatly outnumbered, they are finding more and more opportunities for employment in the ranks of this latest transportation medium.¹⁹⁴

Earhart's advocacy and contributions soon persuaded more women to enter the world of aviation. Earhart, however, was only one of the many important American figures in aviation as pilots were also inspired by the flights of Charles "Lucky Lindy" Lindbergh, another important figure in aviation history. Lindbergh, who was famous for his transatlantic solo flight from New York to Paris in 1927, was one of the first pilots to popularize aviation in American society throughout the interwar period. Many women who were interested in aviation, including Earhart, looked up to Lindbergh as a role

¹⁹² Landdeck, *The Women with Silver Wings*, 13; Melissa Lindberg, "Amelia Earhart: In the Cockpit and in the Public Eye," *Library of Congress Prints & Photos* (blog), *Library of Congress*, June 4, 2020, <https://blogs.loc.gov/picturethis/2020/06/amelia-earhart-in-the-cockpit-and-in-the-public-eye/?loclr=eaptb>.

¹⁹³ Amelia Earhart, "Speech by Amelia Earhart (Transcript)," Library of Congress, accessed October 30, 2022, <https://www.loc.gov/item/afccal000410/>; Landdeck, *The Women with Silver Wings*, 17; "Our History," Who We Are - History, Ninety-Nines, last accessed November 7, 2022, <https://www.ninety-nines.org/our-history.htm>; Rickman, *Betty Gillies, WAFS Pilot*, 8, 11.

¹⁹⁴ Amelia Earhart, "Speech by Amelia Earhart," Library of Congress, accessed October 30, 2022, <https://www.loc.gov/item/afccal000004/>; Amelia Earhart, "Speech by Amelia Earhart (Transcript)," Library of Congress, accessed October 30, 2022, <https://www.loc.gov/item/afccal000410/>.

model because of his record-breaking reputation as a pilot and because of how he advocated that aviation held many new possibilities for both men and women at the time.¹⁹⁵ Nancy Love and Jacqueline Cochran, the founders of the Women's Auxiliary Ferrying Squadron (WAFS) and Women Airforce Service Pilots (WASP) programs, were the most significant pilots influenced by Earhart and Lindbergh's achievements as they went on to offer further contributions for women in aviation by the 1940s.

Cochran's past is a little difficult to discuss because she falsified parts of her memoirs after World War II. Jacqueline Cochran, born as Bessie Lee Pitman in Gateswood, Alabama, grew up in the Florida logging camps of Sawdust Road with her impoverished family and no formal education. Cochran grew up working small time jobs at the sawmill for most of her childhood until she became a beautician well-regarded for her perming skills in Montgomery, Alabama.¹⁹⁶ She later started her own line of cosmetics as a business after she met her future husband, a wealthy businessman known as Floyd Odlum, who helped fund her business ventures. Odlum, however, had one condition for Cochran to meet if she wanted to start her business and it was that she had to take flying lessons to advertise and manage her cosmetics business in different stores across America, a condition and challenge she was reluctant to accept.¹⁹⁷

¹⁹⁵ Bell, *Sisters of the Wind*, 3, 4, 141-142, 151; Barbara Ganson, *Texas Takes Wing: A Century of Flight in the Lone Star State* (Austin: University of Texas Press, 2014), 49, 55, 56, 61, 63, 73; Landdeck, *The Women with Silver Wings*, 51, 59, 92.

¹⁹⁶ Jacqueline Cochran and Maryann Bucknum Brinley, *Jackie Cochran: The Autobiography of the Greatest Woman Pilot in Aviation History* (New York: Bantam Books, 1987), 7-11; Leslie Haynsworth and David Toomey, *Amelia Earhart's Daughters: The Wild and Glorious Story of American Women Aviators from World War II to the Dawn of the Space Age* (New York: William Morrow and Company, Inc., 1998), 6-7; Rich, *Jacqueline Cochran*, 2-3, 107; Whittell, *Spitfire Women of World War II*, 16, 133-136.

¹⁹⁷ Cochran and Brinley, *Jackie Cochran*, 56-58; Landdeck, *The Women with Silver Wings*, 47; Merry, *Women Military Pilots of World War II*, 16; Whittell, *Spitfire Women of World War II*, 134-135.

Odlum's challenge, however, served as the catalyst to Cochran's interest in aviation, and she immediately became hooked on the sport after she successfully beat Odlum's wager that she could not learn to fly within three weeks. From then on, Cochran participated in many major air races that were popular all over the U.S. in the 1930s and grew as a talented pilot. Cochran set multiple air records for women which included the world's unlimited speed record for women in 1937, winning the Bendix Trophy with an experimental pursuit plane in 1938, and setting a women's altitude record in 1939.¹⁹⁸ Needless to say, Cochran was a popular pilot for her time, and her success in the cosmetics business allowed her to excel further in the field as she made connections with socially elite individuals. Not only was Cochran popular among women pilots and American socialites in the 1930s, but she also became the next leader of Earhart's Ninety-Nines organization after the famous pilot's disappearance in 1937. It was perhaps due to this prominence in American aviation that Cochran, aside from Nancy Love, was the only woman in the U.S. with enough fame and influence to argue that the U.S. Army needed to utilize women pilots if America ever entered World War II.¹⁹⁹

After Cochran heard a World War I German pilot at a party in 1936 insist that Germany was intent on war with America, she feared that the U.S. was unprepared to match Germany's growing airpower.²⁰⁰ In many ways, Cochran's estimation was later proven correct after the U.S. was launched into World War II after Japan's attack on Pearl Harbor. By January 1942, the U.S. Army lacked a significant number of combat

¹⁹⁸ Cochran and Brinley, *Jackie Cochran*, 19-20, 28-29, 41, 127-128, 144-145, 157-165; Landdeck, *The Women with Silver Wings*, 47; Merry, *Women Military Pilots of World War II*, 16.

¹⁹⁹ Landdeck, *The Women with Silver Wings*, 47-49; Whittell, *Spitfire Women of World War II*, 135-136.

²⁰⁰ Merry, *Women Military Pilots of World War II*, 25.

pilots ready for war since aviation was still a new field.²⁰¹ The U.S. Army Air Corps subsequently drafted all American pilots with aviation experience to report to the military for combat, manufacturing, and ferry training. Trained aviators were in high demand because many U.S. Army commanders understood Germany's advantage in air warfare with their air force, but most of all, "it was clear that this new conflict was going to be fought, and won, in the air."²⁰² However, despite the fact that the U.S. Army Air Corps wanted as many experienced pilots as possible, women were not allowed to volunteer as pilots for the Army Air Corps.²⁰³

Cochran initially took her concerns about what she learned from the 1936 party to the chief of the U.S. Army Air Corps, Major General Oscar Westover, but she was quickly dismissed by him. Cochran then asked Eleanor Roosevelt to recommend that women relieve male pilots from their routine jobs to bolster combat pilot numbers after she heard of Poland's surrender to Germany in September 1939. Eleanor Roosevelt was a staunch supporter of women's rights in American society; she was a strong advocate for women pilots along with her husband, President Franklin D. Roosevelt. In fact, the First Lady later became a prominent vocal supporter of the future women pilot programs after she wrote her "My Day" column that focused on women pilots and their cause to support the American war effort.²⁰⁴ Cochran then presented her idea to the U.S. Army Air Force (USAAF) and was met with skepticism from General Henry H. "Hap" Arnold, the chief of the U.S. Army Air Corps. General Arnold, along with the rest of the Air Force,

²⁰¹ *War Comes to America*, directed by Frank Capra and Anatole Litvak (1942; Renton, WA: TOPICS Entertainment, Inc., 2008), DVD.

²⁰² Landdeck, *The Women with Silver Wings*, 8.

²⁰³ *Ibid.*, 8, 28.

²⁰⁴ *Ibid.*, 44-45, 60-61; Cochran and Brinley, *Jackie Cochran*, 134; Merry, *Women Military Pilots of World War II*, 25.

believed that women were not capable of flying multiengine military aircraft. Instead, General Arnold recruited Cochran to train in and fly a Lockheed Hudson bomber from Canada to Scotland with the intent of promoting the United States' Lend Lease program in Europe while discerning how well a woman could pilot heavy military aircraft.²⁰⁵

Consequently, Cochran's assistance with the Lend-Lease program and her flight to Scotland helped her formulate a plan to incorporate women as a unit for the U.S. military. After she met Pauline Gower of the ATA during her stay in England, Cochran reported her findings on British women pilots to General Arnold and his associates in Washington D.C. upon her return to the U.S. in hopes that it would start a program of her own. Cochran also relayed her observations to American newspapers in hopes of garnering public support for American women pilots to perform ferry work.²⁰⁶ Lieutenant Colonel Olds soon afterwards asked Cochran to create a list of qualified women pilots for the Ferry Command's records in case women were ever employed to ferry aircraft due to wartime conditions. In early 1942, General Arnold asked Cochran to recruit the women from her list of qualified pilots to assist the ATA in Britain. Cochran agreed to General Arnold's compromise and later made him promise that she would become the head of a U.S.-based female aviation group if they were ever assembled.²⁰⁷

²⁰⁵ Cochran and Brinley, *Jackie Cochran*, 167-171, 174-179; Landdeck, *The Women with Silver Wings*, 61; Merry, *Women Military Pilots of World War II*, 25-26; Amy Goodpaster Strebe, *Flying for Her Country: The American and Soviet Women Military Pilots of World War II* (Westport: Praeger Security International, 2007), 5-6; Robert Kane, "Women Prove They Have the 'Right Stuff' to Fly," *Air Force Link*, March 7, 2008, ProQuest.

²⁰⁶ Landdeck, *The Women with Silver Wings*, 61-62; "Miss Cochran, Back, Urges U.S. to Train Woman Fliers for War: First of Sex to Ferry Warplane to Britain, She Tells How Girl Pilots Are Relieving Men for Actual Combat Operations," *New York Times*, July 2, 1941.

²⁰⁷ Cochran and Brinley, *Jackie Cochran*, 180-183, 188-190, 192-193; Landdeck, *The Women with Silver Wings*, 62-63; Merry, *Women Military Pilots of World War II*, 26-28, 30; Sarah Byrn Rickman, *Betty Gillies, WAFS Pilot: The Days and Flights of a World War II Squadron Leader* (Colorado: Flight to Destiny Press, 2020), 35.

While Cochran's determination to form an all-female American aviation unit for the Army Air Force was present in her proposals to Army higher-ups, they were far from a feminist cause and were primarily a byproduct of the war. This was mainly evident in Cochran's proposals to U.S. Army officials and Mrs. Roosevelt where she always emphasized that women pilots would release men to serve overseas rather than replace them, a common argument from American women in various military services. The term "release," rather than "replace," was the key to Cochran's success in appealing to USAAF officials. She was insistent to maintain beliefs that women needed to stay in the realm of a traditionally feminine, supportive, and submissive role, while she pushed for women to occupy a male dominated position at the time.²⁰⁸

This sense of hypocrisy regarding women's roles in both civil and military aviation is even more prevalent with Cochran's language in some interviews. In an interview with the *New York Times* on July 13, 1941, it was reported that "she thinks that women have no business in professional peacetime aviation, and that they certainly should have nothing to do with combat flying. 'When women start fighting . . . then something really ghastly will have happened to the world.'"²⁰⁹ So, much like American society during World War II, Cochran fought for women to support the war as pilots while she stressed their femininity at the same time.

Shortly after Cochran agreed to General Arnold's proposal, she sent out two-page telegrams to women pilots in America and travelled across the country to offer them an opportunity to aid the war effort by flying if they were skilled enough. The telegrams

²⁰⁸ Cochran and Brinley, *Jackie Cochran*, 200; Landdeck, *The Women with Silver Wings*, 60; Rich, *Jacqueline Cochran*, 163.

²⁰⁹ Elizabeth R. Valentine, "No. 1 Woman Flier: Jaqueline Cochran, who flew a bomber to Britain, advises American women to follow a British example," *New York Times*, July 13, 1941.

provided detailed information regarding the application process, the requirements, payment, transportation, ranks in the ATA, and uniform distribution. The requirements specifically stated that applicants had to undergo an interview process and an ATA examination that included flight test and physical examinations in Montreal, Canada. The telegram itself failed to mention that a medical examination was another requirement conducted at the ATA's headquarters in Maidenhead before the women were allowed to fly for the ATA. The applications for the ATA American Contingent were also incredibly specific as it contained twenty-seven questions that asked the women to provide detailed personal information and to list their aviation experience. Some of these applications even required the consent of the volunteers' parents or guardians despite the fact that their ages were between twenty-one to thirty-five.²¹⁰

Cochran received over three hundred applications from American women pilots all over the country, which caught her off guard over the reception of her call, and she interviewed the first two groups of applicants individually in person or over the phone during the early selection process. Out of the three hundred applicants, Cochran selected forty prime candidates to report to Montreal where they were examined, inoculated, and performed flight tests with ATA officer Harry Smith. Only twenty-five out of the forty American candidates Cochran recruited were accepted into the ATA's ranks, which was mostly attributed to Smith's harsh judgement towards the women where he considered them unable to fly if they so much as argued with him. Cochran later kept

²¹⁰ Barclay H. Farr, "Letter to Jacqueline Cochran," Dwight D. Eisenhower Library, Jacqueline Cochran Papers, February 9, 1942, Air Transport Auxiliary Section, Box No. 1; Virginia Farr, "Air Transport Auxiliary American Unit Volunteer's Application," Dwight D. Eisenhower Library, Jacqueline Cochran Papers, February 3, 1942, Air Transport Auxiliary Section, Box No. 1; Stratford, *Contact! Britain!*, 2, 10-11, 17.

correspondence with the volunteers' parents and loved ones while they served in the ATA to assure them about the status of their daughters.²¹¹

By April 1942, Cochran's twenty-four personally selected women pilots sailed across the Atlantic Ocean by ship to assist the ATA with their ferrying efforts; Cochran herself travelled to England before the volunteers by air in January 1942 so she could greet them personally. Cochran's American volunteers, despite making a rude first impression upon their first night in England by failing to attend a dinner meeting that Gower planned, followed the same workload as British women in the ATA by ferrying Wellingtons and Spitfires. The British initially stereotyped the American volunteers as movie stars or gold diggers, but these volunteers quickly proved the British wrong after numerous headlines in the *New York Times* lauded their work.²¹²

Cochran, however, was the odd one out of the group from the British perspective as many British pilots resented her for not flying to support their efforts during her stay. Cochran instead took on the title of "flight captain" and "considered her role in [the] ATA to be a coordinator and observer rather than participant."²¹³ Cochran's determination to prove that American women could ferry military aircraft made her message perfectly clear to many in her involvement with the ATA, and it effectively

²¹¹ "American Women to Ferry Planes: Jaqueline Cochran Recruiting Groups to Serve in British Isles Until Needed by U.S.," *New York Times*, January 24, 1942; Nona Baldwin, "25 Women Fliers Joining the British: Official Sources Confirm Report, Group Has Contracts with Air Transport Auxiliary for Ferrying in England," *New York Times*, March 26, 1942; Jacqueline Cochran, "Letter to Lorna Simpson," Dwight D. Eisenhower Library, Jacqueline Cochran Papers, March 19, 1942, Air Transport Auxiliary Section, Box No. 2; Cochran and Brinley, *Jackie Cochran*, 185, 189; Stratford, *Contact! Britain!*, 1-5, 13-14, 33-34; Whittell, *Spitfire Women of World War II*, 142-143, 218.

²¹² "More U.S. Women to Fly in Britain: Jacqueline Cochran, the Chief of First Group, Will Get Help in Ferrying Soon," *New York Times*, June 1, 1942; "Group Serving in Britain: American Girls on Air Ferry Duty Are Under Contract," *New York Times*, September 12, 1942; Whittell, *Spitfire Women of World War II*, 13-14, 18, 144.

²¹³ Merry, *Women Military Pilots of World War II*, 40-41; Whittell, *Spitfire Women of World War II*, 154-156.

demonstrated how her connections pushed her agenda. Unfortunately, this also clouded her judgement as “coordinator” after she discovered the creation of an American women’s ferrying unit by September 1942, the Women’s Auxiliary Ferrying Squadron.

Nancy Harkness Love became the second prominent figure who supported the integration of women into U.S. military aviation. Unlike Cochran’s popular reputation and achievements, Love was well known among aviation circles for her practical reputation as an American pilot. Love was born in Houghton, Michigan to a physician and was a descendant from a prominent Boston family that had long standing roots in the state since the 1630s.²¹⁴ Although Love attended Milton Academy and Vassar College, both prominent schools for high societal members, she was not interested in higher education and preferred to learn aviation. Love developed an interest in aviation at the age of sixteen after low-flying planes caught her attention and she paid a barnstormer, a pilot who sold airplane rides and performed stunts, to take her flying over her hometown. Four years later, Love dropped out of Vassar college due to multiple reasons, but most of all was that she wanted to pursue a career in aviation.²¹⁵

Love had a hard time making money at the start of her aviation career because civilian pilots did not earn a lot of income during the Great Depression. Fortunately, Love found work at East Boston Airport where she worked as a saleswoman selling airplanes by commission, and it was there that she met her future husband, Robert M. Love. Robert Love was a pilot and officer in the Air Corps Reserves who supported Nancy Love’s passion for flying as he subsequently offered connections in the U.S. Army and the

²¹⁴ Landdeck, *The Women with Silver Wings*, 33-34; Merry, *Women Military Pilots of World War II*, 16.

²¹⁵ Haynsworth and Toomey, *Amelia Earhart’s Daughters*, 26-27; Landdeck, *The Women with Silver Wings*, 33-36; Merry, *Women Military Pilots of World War II*, 16-17.

federal government.²¹⁶ Nancy Love continued to make progress as a professional pilot as she test piloted new inventions, such as a prototype airplane/automobile called the “aircar” in 1937, and she worked in the federal government’s air-marking program which provided assistance to help navigate lost pilots.

These accomplishments and the hard work put into Love’s career bolstered her name within aviation circles that later offered her the opportunity to work with her husband as a civilian administrator to the Air Transport Command’s (ATC) new Domestic Wing in 1942. It was particularly notable for Love’s future career that she worked under Colonel Robert Baker, the commanding officer of the Domestic Wing.²¹⁷ It was not long after this that Love’s role within the ATC, as well as her husband’s position as deputy chief of staff, provided her with an abundance of connections with U.S. Army officials that were vital to approve her establishment of the first U.S.-based women’s ferrying group.

Love eventually worked with Lieutenant Colonel Olds at Ferry Command to put together a list of qualified women pilots in apprehension of the war. Lieutenant Colonel Olds later decided to call a meeting between Love and Cochran because he assumed that the two could work together to establish a group of women pilots and free men for combat duty. Both Love and Cochran were well aware of each other before the meeting thanks to aviation circles, but they unfortunately had a falling out during the meeting. While Love and Cochran shared the same passion to bring women into military ferrying aviation, they both could not have disagreed more on how to specifically run the

²¹⁶ Haynsworth and Toomey, *Amelia Earhart’s Daughters*, 27.

²¹⁷ Landdeck, *The Women with Silver Wings*, 37-38, 41-42; Merry, *Women Military Pilots of World War II*, 17, 28-29.

program.²¹⁸

Katherine Sharp Landdeck accurately described each of the individual's methods in running a women's ferrying program in *The Women with Silver Wings*:

[Love] wanted a small program of fewer than one hundred highly experienced women pilots, an elite group that would be able to step into flying for the military as needed. [Cochran] wanted something much bigger and more democratic: she wanted to potentially train thousands of women to help with all kinds of flying. Equally confident, equally stubborn, they were both certain they were right.²¹⁹

This dispute was essentially the first that led to several issues that occurred down the line between women who were loyal to Nancy Love's small, yet experienced, ferrying squadron and Jacqueline Cochran's massive experimental ferrying organization. More importantly, it fanned the flames of the inexplicable rivalry between Love and Cochran that inadvertently became one of the factors in the disbandment of American women pilots in 1944.

Shortly after the war broke out in Europe, Robert Love also shared a similar idea of incorporating women into military aviation to free men for combat duty. The fact that Nancy Love and her husband shared the idea was of great significance, but it was thanks to her acquaintance with Lieutenant Colonel Olds that their idea gained traction.²²⁰ Love pitched her idea for a squadron of elite and experienced women pilots who could ferry military aircraft in a letter to Lieutenant Colonel Olds on May 1940, but she received the same response as Cochran had. It was not until General Harold L. George replaced Lieutenant Colonel Olds in March 1942 that Love pushed for her idea again and garnered

²¹⁸ Landdeck, *The Women with Silver Wings*, 62.

²¹⁹ *Ibid.*, 62-63.

²²⁰ *Ibid.*, 36-38; Merry, *Women Military Pilots of World War II*, 28-29; Strebe, *Flying for Her Country*, 7.

a lot of support, even if it took some time before anything was realized.²²¹

Love's initial idea was to bring in about fifty skilled female aviators, between the ages of twenty-one and thirty-five, with at least five hundred hours of recorded flight time and possessed a minimum high school education. Such a demand for a unit of this size required a few logistical factors to be considered before formation, and this was primarily the reason why Love's program was stalled. For one, General George, with the help of the commanding officer of the Ferrying Division, Colonel William Tunner, had to figure out how to solve the issue of the women pilots' housing if they were accepted as ferry pilots. The women clearly needed a base of operations where they could easily and efficiently report for duty if they ferried the numerous planes produced at the time. Colonel Tunner eventually called on Love's former boss, Colonel Baker, for assistance with this issue. Colonel Baker reported in response that his base in Wilmington, Delaware, called New Castle Army Air Base, had suitable housing for the women, but the barracks would need to undergo remodeling for six weeks since they were not designed for women.²²²

Inadequate housing and accommodations were not the only obstacles in logistical planning; military officials also had to figure out the status of female pilots in the armed forces during this six-month period. Back when Love started working with General George and Colonel Tunner, she also recommended that her women pilots enter the Women's Army Auxiliary Corps (WAAC) as second lieutenants.²²³ In Love's mind, her program's work aligned with the WAAC since women were recruited as cooks, drivers,

²²¹ Landdeck, *The Women with Silver Wings*, 38-39, 40, 42.

²²² *Ibid.*, 43.

²²³ *Ibid.*

typists, and clerks. Because the AAF refused women pilots for volunteer service, it made sense that the next logical step for Love was to recruit her pilots into the WAAC since they were in the process of gaining militarization through the WAAC militarization bill. However, the bill's consideration in Congress took too long for Love to wait out and she ultimately opted to activate her own program with the women as civilians rather than second lieutenants. Furthermore, the WAAC militarization bill did not list that it would provide any flight pay for women pilots integrated in the WAACs, which was an unacceptable drawback when other non-women pilots would receive pay. Love at least recognized that if she integrated her program as a civilian unit under the Ferrying Division, her women would get paid for their labor.²²⁴ Once these logistical issues were resolved, it did not take long for Love's program to finally receive approval.

Nancy Love, with General George's recommendation and General Arnold's approval, was officially appointed the Director of Women Pilots for the WAFS on September 5, 1942, the first all-female squadron of its kind to serve the USAAF. While the squadron was initially intended to consist of fifty women pilots, it turned out to recruit only twenty-eight women pilots, including Love, who had over 1,000 flying hours and were stationed at New Castle Army Air Base. The first of these twenty-eight pilots were Helen Mary Clark, Cornelia Fort, Betty Gillies, Teresa James, Esther Nelson, Aline Rhonie, and Adela Scharr by September 1942.²²⁵ While this appeared as an unprecedented event in U.S. history, the WAFS were less concerned about the publicity

²²⁴ Ibid., 43-44; Merry, *Women Military Pilots of World War II*, 45.

²²⁵ Landeck, *The Women with Silver Wings*, 45; Rickman, *Betty Gillies, WAFS Pilot*, 15, 19; Rob Simbeck, *Daughter of the Air: The Brief Soaring Life of Cornelia Fort* (New York: Atlantic Monthly Press, 1999), 120-121, 126; "The WASP Roster," WASP Records, Wings Across America, last accessed September 28, 2022, <http://www.wingsacrossamerica.us/wasp/roster/roster.pdf>.

they would receive and focused more on the task at hand, ferrying military aircraft.

Each of these women had their own reasons for joining the WAFS, but Cornelia Fort perhaps had the most interesting story out of the whole batch: she was present during the Japanese attack at Pearl Harbor on December 7, 1941. Fort was a flight instructor at John Rogers Field next to Pearl Harbor where she taught students how to fly trainers. On that fateful day, she was flying with one of her students in a two-seater when she was suddenly attacked by a Japanese fighter. Fort and her student barely escaped the barrage of bullets with their lives after the fighter just barely missed the gas tank of her plane. From then on, Fort was motivated to assist the war effort in whatever way she could, and she eventually found her calling with the WAFS.²²⁶ Fort could have easily returned home, or to her instructing job, and counted her blessings that she was still alive, but she insisted that something had to be done to help end the war.

Two months after the attack on Pearl Harbor, more American women joined the WAFS as many of these women also felt the same need to contribute to the war effort with their flying skills. These women who joined the WAFS after the first eight volunteers were Nancy Batson, Delphine Bohn, Phyllis Burchfield, Barbara Donahue, Barbara Erickson, Esther Manning, Gertrude Meserve, Florene Miller, Barbara Poole, Helen Richards, Evelyn Sharp, and Barbara Towne. The final members who joined the WAFS were Bernice Batten, Kathryn Bernheim, Betsy Ferguson, Dorothy Fulton, Lenora McElroy, Helen MacGilvary, Dorothy Scott, and Katherine Thompson in November and December 1942.²²⁷ Love was also registered as an active participant in the WAFS

²²⁶ "First of the WAFS Pass Ground Tests: Five of the New Group Under Mrs. Love Begin Service at Newcastle, Del.," *New York Times*, September 11, 1942; Landdeck, *The Women with Silver Wings*, 3-5.

²²⁷ Rickman, *Betty Gillies, WAFS Pilot*, 29, 36, 38; Wings Across America "The WASP Roster."

because it was more important for her to show the worth of the WAFS to the Army personally. This was her main reason for flying, but there was also a personal reason because “as a pilot herself she was bored, [and] ‘dissatisfied’ with the limitations on the types of small, light trainer airplanes the women were being allowed to fly.”²²⁸ Not only was this a testament to Love’s resolve towards supporting the war effort through the WAFS, but it also juxtaposed her efforts with those of Jacqueline Cochran while she was working at the ATA.²²⁹

As the WAFS fully assembled as a unit, the USAAF required that all volunteers had to take mandatory military flight training for four weeks. The *New York Times* outlined the curriculum of this training regimen in their initial report on the WAFS on September 11, 1942. The article stated in brief detail that “the four-week course will consist of ground courses on procedure, taught by Army officers now training male civilian fliers for ferrying duty. The course will include several hours of flying every day in the types of planes which the women eventually will fly from factories.”²³⁰ This was a requirement the volunteers had to complete if they wanted to aid the war effort, even if it seemed initially trivial to them because of their experience.

In reality, most of the women had no issue in taking the training course as Ground School taught them new subjects in meteorology, navigation, military law, drill, courtesy code, manual of arms training with rifles, gas mask drills, morse code, weapons assembly, and first aid. Each of these subjects were equally taught to male pilots in Ground School, but the one inequality to this was that the women were required to take

²²⁸ Landdeck, *The Women with Silver Wings*, 75.

²²⁹ Ibid.; Merry, *Women Military Pilots of World War II*, 81-83; Rickman, *Betty Gillies, WAFS Pilot*, 44.

²³⁰ “First of the WAFS Pass Ground Tests: Five of the New Group Under Mrs. Love Begin Service at Newcastle, Del.,” *New York Times*, September 11, 1942.

more hours than a male pilot did.²³¹ Ground School even helped to reduce bad habits that members of the WAFS picked up in their years of flying. Teresa James was one pilot who expressed her appreciation after she found that the training course helped correct flaws in her landing procedures.²³² Women in the WAFS took great care to learn flying “the Army way” as it hinged on the success of the program, but this training regimen contained valuable lessons that the women remembered once they were cleared for their ferrying duties.

Work within the WAFS initially consisted of ferrying light single-engine basic, personal, advanced, and primary trainers. They also ferried other more advanced ships like fighter aircraft, and twin-engine transport and bomber aircraft of varying models across the country to multiple military air bases. The most common aircraft ferried at first were L-4B Piper Cubs because they were the lightest aircraft for women by Army standards, but the WAFS had the opportunity to be the first women in the U.S. to deliver fighter aircraft like P-47 Thunderbolts and P-51 Mustangs over time. Many of these aircraft contained classified information or equipment on board while in transport which called for WAFS pilots to be issued .45 automatic pistols to shoot a special red button that destroyed the plane if they were ever captured by an enemy.²³³ The potential thought of capture or carrying a weapon did not seem to faze the WAFS, however, based on Betty Gillies’ reaction when she was issued her own equipment: “This morning, I acquired a .45 automatic pistol from Ordinance. I am to tote it when I ferry ‘47s. Right now, I am

²³¹ Rickman, *Betty Gillies, WAFS Pilot*, 23; Sarah Byrn Rickman, *Finding Dorothy Scott: Letters of a WASP Pilot* (Texas: Texas Tech University Press, 2016), 33-35, 40, 41-42; Landdeck, *The Women with Silver Wings*, 28-29, 65, 66.

²³² Merry, *Women Military Pilots of World War II*, 57-58.

²³³ Rickman, *Betty Gillies, WAFS Pilot*, 26, 27, 32, 41, 44, 46, 51-53, 56, 61, 68-69; Rickman, *Finding Dorothy Scott*, 54.

toting it around the [Bachelor Officers Quarters] to get used to it—so I can wear it in public with a straight face. More darned fun!”²³⁴

While ferry work was a simple task for the WAFS to perform, the women got the chance to transport aircraft across a whole range of states, cities, and towns within the U.S. The WAFS were able to make these long trips because they operated out of three other airfields in Long Beach, California; Romulus, Michigan; and Dallas, Texas.²³⁵ The reason why women in the WAFS only delivered planes across the country was because they were barred from performing transoceanic flights. Unlike men in the Ferrying Division, the WAFS were relegated to delivering their planes to Army bases or ports in the U.S. that shipped the aircraft overseas for the Lend Lease Program. USAAF officials ruled that transoceanic flights were too hazardous for women pilots to conduct during the war, or that there were no facilities for women in overseas airfields; the closest women ever got to flying outside the country was for the occasional delivery to Canada and Alaska.²³⁶

The WAFS faced a minimal amount of danger compared to the British and Soviets because the U.S. was quite a distance away from the warfronts in European and Pacific theaters. However, varying weather patterns across the U.S. and malfunctioning equipment or aircraft often delayed their estimated delivery schedules.²³⁷ American women pilots dealt with various kinds of inclement weather, including conditions like rainstorms, sandstorms, fog, muddied ground, thunderstorms, and snowstorms. Unlike

²³⁴ Rickman, *Betty Gillies, WAFS Pilot*, 51.

²³⁵ Merry, *Women Military Pilots of World War II*, 78-79; Landdeck, *The Women with Silver Wings*, 114; Rickman, *Finding Dorothy Scott*, 44, 48, 53, 91.

²³⁶ Merry, *Women Military Pilots of World War II*, 89; Rickman, *Betty Gillies, WAFS Pilot*, 2, 51-53; Rickman, *Finding Dorothy Scott*, 90, 92, 106.

²³⁷ Merry, *Women Military Pilots of World War II*, 96, 100; Simbeck, *Daughter of the Air*, 132, 162, 165, 167, 184.

the women in the British ATA, American women mostly waited for the weather to clear locally, or they redirected their flights to another nearby airfield if they experienced bad weather mid-delivery.²³⁸ Dorothy Scott wrote to her father about many instances of terrible storms, but one letter she wrote described how detrimental the cold weather was for ferry work:

I've just finished another wonderful trip. Weather cleared Wednesday so after wrestling with cold engines and colder hands we got going. Boy! It was cold—about 15 degrees on the ground. We all wore our heavy flying jackets and boots and were grateful for the hatch cover. The cabin heater was effective by name only—no heat. . . The next day we flew to our delivery point—again too cold, and I did the navigating and did fine.²³⁹

The WAFS attracted a significant amount of attention from the press in a short time about their exploits with a mixed, but mostly positive, reception. National news organizations like *Pathé News*, the *New York Times*, and *Life* magazine were the first of these groups that reported on the WAFS to the American public with astonished perspectives.²⁴⁰ In late September, Gillies wrote in her diary, “Up at 6:45 [AM] on duty at 8. Devoted the entire day to newsreels, photographers, and reporters! By order of the War Department!”²⁴¹ While the positive reception was welcoming for Love, she also endured a lot of stress to ensure that only good publicity was released about the WAFS to avoid negative press. Landdeck further explained the reasons behind Love’s concerns about American publicity as she wrote that “[Love] had watched as the Women’s Army Corps

²³⁸ Merry, *Women Military Pilots of World War II*, 96; Rickman, *Betty Gillies, WAFS Pilot*, 2, 33, 34, 56, 102; Rickman, *Finding Dorothy Scott*, 66-67, 78, 79, 91, 108, 111; “Texas Weather,” *The Fifinella Gazette*, February 10, 1943.

²³⁹ Rickman, *Finding Dorothy Scott*, 64-65.

²⁴⁰ “First of the WAFS Pass Ground Tests: Five of the New Group Under Mrs. Love Begin Service at Newcastle, Del.,” *New York Times*, September 11, 1942; Rickman, *Betty Gillies, WAFS Pilot*, 17, 20; Landdeck, *The Women with Silver Wings*, 66, 70-71; “The Women’s Auxiliary Ferry Squadron Reports for Duty,” *New York Times*, September 24, 1942.

²⁴¹ Rickman, *Betty Gillies, WAFS Pilot*, 20.

struggled to fight public sentiment that the women in the military were either prostitutes or lesbians—as far as the American public was concerned, the two were equally indecent—and knew that anything that fed that perception could mean the end of the already tenuous program.”²⁴² The negative publicity, however, was rare at most and the WAFS had a good reputation among the Allies. In many ways, the WAFS actions spoke louder than any of the rumors that grew about them.

Soon enough, Cochran caught wind of Love’s ferrying squadron while in Britain and was infuriated because Love, “someone younger, less notable, and (at least in [Cochran’s] estimation) less worthy,” was chosen over her to lead the first group of women ferrying pilots. Cochran was also incensed because General Arnold did not keep his promise to assign her as the head of an American women’s ferrying group if it was established.²⁴³ Cochran subsequently dashed for America to air her grievances, leaving her American volunteers in the ATA under the leadership of Ann Wood, the natural leader of the group.²⁴⁴ This was the first of many instances where Cochran’s determination to lead a women’s unit shaped her actions and created negative consequences for the future of American women pilots. Her departure from the ATA was no issue for the British, but the fact that Cochran immediately abandoned her position as “flight captain” to pursue a non-existent leadership position should have spoken volumes about her qualities as a leader to the USAAF.

Regardless of this behavior, Cochran returned to America and demanded answers from General Arnold while she argued that Love’s single squadron of WAFS were not

²⁴² Landeck, *The Women with Silver Wings*, 70.

²⁴³ *Ibid.*, 48, 49; Merry, *Women Military Pilots of World War II*, 30; Rickman, *Betty Gillies, WAFS Pilot*, 35.

²⁴⁴ Whittell, *Spitfire Women of World War II*, 168-169.

enough to meet ferrying demands after America recruited more male ferry pilots for overseas duty. She insisted to General Arnold that she could supervise the training of more female pilots at an army flight facility and add to the numbers of the WAFS. General Arnold approved Cochran's idea and named her the head of the Women's Flying Training Detachment (WFTD) on September 14, 1942, at Houston, Texas. Cochran then established the WFTD's training at the Howard R. Hughes Airport in Houston, Texas, one of the worst cities for flight training due to its terrible weather, but it was the only available airport she could train her candidates. Fortunately enough, Cochran later convinced the Army to open a second school for the WFTD at Avenger Field in Sweetwater, Texas by January 1943 after she took notes on how the poor weather delayed training.²⁴⁵

Once the organization officially opened in Houston by November 1942, the call was made for women between the ages of twenty-two to thirty-five with at least two hundred pilot hours and in receipt of a high school diploma to apply for the 319th Army Air Forces Flying Training Detachment. A total of 25,000 American women applied to the WFTD, but only 1,074 officially graduated by 1944.²⁴⁶ Cochran was personally responsible for picking out her prospective trainees for the first WFTD class and she was particularly strict in her selection for the first thirty students. Cochran was particularly eager to recruit women who had an exceptionally positive attitude and excellent social

²⁴⁵ Ann Darr, "The Long Flight Home: Women served – and died – in WWII. Now They Are Remembered," Article Archive, Wings Across America, last accessed October 5, 2022, http://www.wingsacrossamerica.us/records_all/wasp_articles/darr.pdf; Landdeck, *The Women with Silver Wings*, 118; "Named to Direct Women's Air Work: Jacqueline Cochran Appointed to Train Them in Cross-Country Flying," *New York Times*, September 14, 1942; Rickman, *Betty Gillies, WAFS Pilot*, 35; Strebe, *Flying for Her Country*, 8.

²⁴⁶ Landdeck, *The Women with Silver Wings*, 77-78; "STATS," WASP Statistics, Wings Across America, last accessed September 28, 2022, <http://www.wingsacrossamerica.us/wasp/stats.htm>.

skills. If Cochran wanted her project to succeed, then she needed to make it appealing to the commanders in the Ferrying Division who already supported and preferred Love's WAFS program.²⁴⁷

While the WFTD started as an organization to recruit and train novice or amateur women pilots, there were issues with this objective regarding the matter of race. For one, Cochran dissuaded Black American women from applying to the WFTD because of prevalent segregationist beliefs in Texas at the time. Segregation was especially a problem within the military as well, but this issue would never have applied to Cochran's organization because the WFTD was a civilian aviation program not subject to military law.²⁴⁸ Cochran was concerned that the selection of Black female pilots would reflect negatively on the WFTD, but she failed to recognize that Black women pilots flew in other civilian aviation organizations like the Civil Air Patrol and some Tuskegee institutions. It is true that these organizations faced the scrutiny that Cochran was afraid of, but it never resulted in the disbandment of the institutions or firing of the Black pilots.²⁴⁹ Unfortunately, Black women pilots were never permitted to join the WFTD and there is no record indicating that any Black men or women served with the Ferrying Division during the war. Cochran, however, did manage to make some special exceptions for a select few women that came from different backgrounds.

²⁴⁷ Landdeck, *The Women with Silver Wings*, 77-79, 129.

²⁴⁸ *Ibid.*, 129-130.

²⁴⁹ *Ibid.*, 129-131; Lynn Dumenil, ed., "Introduction: The Women behind the Men behind the Gun: Working Women in World War II," in *American Working Women in World War II: A Brief History with Documents* (Boston, MA: Bedford/St. Martin's, 2020), 17-19; Charity Adams Earley, "One Woman's Army: A Black Officer Remembers the WAC, 1989," in *American Working Women in World War II*, ed. Lynn Dumenil, 117-118; Pamela Edwards, "West Virginia Women in World War II: The Role of Gender, Class, and Race in Shaping Wartime Volunteer Efforts," *West Virginia History* 2, no. 1 (2008): 32-33, 35; "Four WACs Sentenced to Hard Labor after Devens Strike," *Baltimore Afro-American*, March 24, 1945; Merry, *Women Military Pilots of World War II*, 42-43.

Cochran's special exceptions were nothing to write home about because diversity among American women pilots in the WFTD was rare in comparison to the British ATA's diverse personnel. For example, the WFTD only accepted two Chinese Americans into their ranks, Hazel Ah Ying Lee from Portland, Oregon, and Margaret "Maggie" Gee from Berkeley, California. While these two women were held in high regard by their classmates, they ran the risk of being misidentified as Japanese by Americans.²⁵⁰ Such a case of misidentification happened once with Lee while she ferried a BT (basic trainer) and was forced to make a landing on a farmer's cotton field because she was caught in a hailstorm. Lee recounted this event not too long after in an interview with *The Avenger* on June 28, 1943:

Easing the brakes on, I brought the BT to a stop on the furrowed cotton field. I cut the engine and climbed out of the cockpit. I scrutinized the BT and found it to be unmarred but how was I after my semi-forced landing? I was thinking that over when a wheezy green sedan jerked to a halt beside BT and me. A lanky farmer followed by a young woman carrying a baby got out of it. 'Are yoh China-gal or Japanee?' asked the man. 'I'm a China-gal, sir. See?' I pointed to my regulation name tag with Hazel Ying Lee printed on it. 'Wall dag gum it, yoh sure made a purty landing,' said the man.²⁵¹

Lee might have downplayed the severity of her situation because her friend and classmate, Madge Rutherford, claimed in a letter she wrote to her parents that Lee was chased around her plane by the farmer with a pitchfork because he believed she was a Japanese spy until she persuaded him otherwise. While this might be easily believable based on the state of American anti-Japanese fervor by the early 1940s, this part of the story might have been fabricated. Many sources that wrote about this event frequently

²⁵⁰ Maggie Gee, "Oral History Account of Work at Shipyards and of Being a WASP, 2003," in *American Working Women in World War II*, ed. Lynn Dumenil, 65-67; Landdeck, *The Women with Silver Wings*, 132-133, 148; Merry, *Women Military Pilots of World War II*, 44.

²⁵¹ Hazel Ah Ying Lee, "'Dad gum it!' Why Don't I Watch the Weather?," *The Avenger*, June 28, 1943, 8.

cited Ruthford's letter as fact, but what they do not consider was that Ruthford was neither present to witness the situation nor did Lee tell her that this specifically happened.²⁵² It is most likely that Ruthford misinterpreted the farmer's initial reaction since Lee described in great detail how the farmer and his family were accommodating to her as hosts while she waited for assistance with her plane.

Lee and Gee seemed to have been the most popular members of the WFTD, but there were a few other classmates with different backgrounds such as Ola Mildred Rexroat, a Native American member of the Oglala Lakota tribe, and Julie Jenner Stege, a Jewish woman. Interestingly, Stege was one out of a few Jewish women in the WFTD who hid her religious beliefs from her classmates while Bernice Falk, another Jewish woman, was open about her background.²⁵³ While diversity in the WFTD was a controversial matter for Cochran at the time, the program was successful in recruiting new women aviators and training them to meet Love's requirements for the WAFS.

The seven-month WFTD curriculum included subjects ranging from physics to instrumental flight along with studies in military law, military history, and how the women could protect themselves with military maneuvers.²⁵⁴ The aircraft they generally practiced in were worn out Stearmans, Wacos, Pipers, and Beechcrafts, which were popular civilian aircraft commonly used by flight instructors. These airplanes were personally brought in by the trainees because the contractors for the WFTD did not yet secure a contract with the Army for the use of military aircraft in training.²⁵⁵ This act of

²⁵² "Hazel Ying Lee: The First Female Chinese-American Pilot," Aerospace Pioneers, Federal Aviation Administration, last accessed November 30, 2022, https://www.faa.gov/about/history/pioneers/media/Hazel_Ying_Lee.pdf; Landdeck, *The Women with Silver Wings*, 148, 381; Merry, *Women Military Pilots of World War II*, 44.

²⁵³ Landdeck, *The Women with Silver Wings*, 132.

²⁵⁴ Darr, "The Long Flight Home."

²⁵⁵ Landdeck, *The Women with Silver Wings*, 77, 87; Schrader, "Winged Auxiliaries," 191.

self-sufficiency was not an uncommon aspect for American women pilots since they were relegated to the bottom level of Army concerns during the war. However, the women's determination maintained their training under troubling managerial and material circumstances which emphasized the strength of their self-reliance over other Allied women pilot groups.

Having command and training over the WFTD was not enough for Cochran as she was determined to have full control over all American women pilot groups. Cochran frequently made suggestions to the USAAF to form a unified and militarized group of women pilots to fly more advanced aircraft than the WAFS after she successfully trained the first graduates of the WFTD. General Arnold soon conceded due to the pressure from Cochran and the sudden influx of graduates from the WFTD that made the two groups too big to remain separate. On August 5, 1943, General Arnold officially merged the WAFS and WFTD into one group under Cochran's leadership that became known famously as the Women Airforce Service Pilots.²⁵⁶

Notwithstanding Cochran's wish to serve as leader over all American women pilots, it made sense to unify the WAFS and the WFTD as a single unit to conform the two groups with each other. Both WAFS and WFTD leaders were not on friendly speaking terms because there was simply too much disdain between the veteran and rookie pilots. The other issue was that Love and Cochran's rivalry extended through their programs as Cochran continued to issue her own orders to the WFTD instead of reporting

²⁵⁶ "Miss Cochran Put in High Air Post: Named Director of Women Pilots in Army and Special Assistant in Air Staff," *New York Times*, July 6, 1942; Landdeck, *The Women with Silver Wings*, 158, 162, 173; Rickman, *Betty Gillies, WAFS Pilot*, 67.

to the Ferrying Division.²⁵⁷ While Dorothy Scott was a member of the WAFS, she noted in a letter to her mother that Cochran was “very much disliked, [and] overbearing.”²⁵⁸ Scott was one of the few women who never held any bad feelings towards WFTD trainees and instead blamed the training school itself for how some of the trainees dropped out of the program.²⁵⁹ Unfortunately, melding the two groups together did not solve the issues as the bitter rivalry continued and lasted well until the WASP was disbanded.

The WASP was established as a quasi-military unit with over one hundred bases across the country, their objectives as a ferrying division slowly garnered over 1,074 female pilots who performed aviation work for the USAAF under the employment of the Civil Service.²⁶⁰ As an experiment, their roles were expanded from the early ferrying jobs of the WAFS and incorporated advanced tasks that were normally reserved for male military pilots. The WASP’s status allowed them to tow aircraft for artillery tracking, perform radar tracking practice in dive bombers, and fly targets for searchlight practice. A select few WASP members were even chosen for projects like stratospheric research on high altitude flying, or experiments that tested the human body’s physical reactions to transitioning from sea level to high altitude in a pressure chamber. WASP trained pilots were also permitted to fly a wider selection of complicated aircraft in comparison to what their predecessors flew. For example, Betty Gillies was the first woman to pilot the new P-61 Northrop “Black Widow,” the USAAF’s first radar equipped twin-engine fighter

²⁵⁷ Landdeck, *The Women with Silver Wings*, 144, 174; Merry, *Women Military Pilots of World War II*, 73-76; Rickman, *Betty Gillies, WAFS Pilot*, 62-64, 87-88, 94-98; Rickman, *Finding Dorothy Scott*, 102-103.

²⁵⁸ Rickman, *Finding Dorothy Scott*, 43.

²⁵⁹ *Ibid.*, 117, 125.

²⁶⁰ Darr, “The Long Flight Home”; Merry, *Women Military Pilots of World War II*, 78-79.

aircraft on June 30, 1944. Ann Baumgartner Carl, another WASP, also became the first woman to fly a jet in the U.S. when she tested the XP-59A, the latest experimental jet-powered aircraft developed in America at the time.²⁶¹

Moreover, WASP members frequently tested battered planes that returned from warzones to ensure they were still operational; some of the women even used these planes for simulated strafing and smoke screen missions, or they were ferried as towing targets for live anti-aircraft training.²⁶² Ann Darr, a veteran WASP, clearly noted these jobs later in her life as “aerial dishwashery,” a term Cochran frequently used to emphasize that women still conformed to American ideas of femininity.²⁶³ This term subsequently downplayed a significant amount of complex work these pilots accomplished by attributing their war contributions as inherently feminine and simple work. However, WASP training through the WFTD clearly emphasized otherwise with the details and dedication put towards the pilot training.

Although the WAFS initially consisted of twenty-eight highly experienced women pilots with an average of one thousand flying hours, the WASP became a stronger unit because Cochran extended the requirements of the WFTD to train women with two hundred or more flying hours. Moreover, Cochran later expanded the WASP’s numbers because she recruited women with far lesser flying hours over time.²⁶⁴ Cochran’s determination to command was a key component for approval before the requirements lowered, even though the change originated from the USAAF’s decision to

²⁶¹ Merry, *Women Military Pilots of World War II*, 90-92; Rickman, *Betty Gillies, WAFS Pilot*, 118, 119-120.

²⁶² Darr, “The Long Flight Home.”

²⁶³ Ibid.; Landdeck, *The Women with Silver Wings*, 162, 190, 232.

²⁶⁴ Rickman, *Betty Gillies, WAFS Pilot*, 36; Schrader, “Winged Auxiliaries,” 188-189, 190.

recruit more women to meet ferrying demands.²⁶⁵ Nevertheless, American women in the WFTD, despite their varied experience, underwent the same training for each graduating class year from 1942 to 1944.

The WAFS and WFTD were never integrated into the USAAF throughout their organization's existence. On the surface, they were strictly a civilian air pool that was hired by the Army to transfer male pilots from ferrying roles to combat positions across the European and Pacific theaters of war.²⁶⁶ However, the main reason neither were an extension of the military was due to the predominant belief that aviation, specifically in the military, was a field for men. This carried over to the WASP when they were considered for military status along the same line as the Women's Army Corps. The WASP almost achieved militarization after California representative John Costello presented House Resolutions 3358 and 4219 to Congress in September 1943 and February 1944. Both bills pushed for the militarization of the WASP into the USAAF with equal status to men, but both bills were defeated in the House of Representatives by June 1944. This was partly because of Cochran's leadership and decisions to answer America's misogynistic beliefs during the war.²⁶⁷

Cochran's relationship with the news, reporters, or any public media outlet for that matter became yet another controversial matter under her leadership of the WFTD and WASP programs. Cochran shared a similar fear with Love about the effects of bad

²⁶⁵ Landdeck, *The Women with Silver Wings*, 50, 63-64, 80, 84, 129.

²⁶⁶ Janene Leonhirth, "Tennessee's Experiment: Women as Military Flight Instructors," *Tennessee Historical Quarterly* 51, no. 3 (1992): 177; Rickman, *Betty Gillies, WAFS Pilot*, 20, 25, 26; Schrader, "Winged Auxiliaries," 189.

²⁶⁷ "WASP Bill Strikes a Committee Snag: Question Raised as to Whether Women Want to Be in the Army," *New York Times*, March 25, 1944; "Army Status Asked for Women Pilots: Miss Cochran in Wasp Report to Arnold Gives Alternative to Discontinuing," *New York Times*, August 7, 1944; Landdeck, *The Women with Silver Wings*, 187, 189, 192-193, 195, 214-215.

publicity on her experimental program, but Cochran unfortunately let her fear control her decision making. While Love allowed publicity for her WAFS and reminded her pilots to be well-behaved in public, Cochran did not allow any publicity on the WFTD and hounded her pilots to never speak about what they were doing to anyone.²⁶⁸ Propaganda was even used by WASP officials to silence the women about what happened within the organization. This was particularly evident in an article titled “Mum’s de Woid for Fifinella” in *The Avenger’s* fifth issue on October 22, 1943:

There are plenty of secrets around here to be kept. What may sound like news worth writing home about is probably just the item we shouldn’t even mention to our best friend. . . The Public Relations Office will take care of such details. This office also will [sic] give out the proper information on accidents that may occur at Avenger Field. So don’t talk it upon yourself to give out the news. Limit yourself to the goings-on-around Avenger that would be of no help to the enemy.²⁶⁹

This tactic, presented as a solution to the bad press, had the opposite effect as solicitous rumors were spread by the American public that the WFTD and WASP were immoral groups like the WAC and WAFS. Many of the rumors by the public claimed that “if women were stationed on an Army base, they must be camp followers, or prostitutes meant to serve the men. And if they weren’t prostitutes, then they must be lesbians. Why else would they want to spend time at an Army base wearing uniforms with so many other women doing ‘men’s’ work?”²⁷⁰ The rumors were false, of course, except for one report within the WFTD that claimed with testimonial evidence how two WFTD trainees engaged in a lesbian affair at Avenger Field; the trainees were promptly dismissed from the program afterwards for this affair because the military prohibited homosexual

²⁶⁸ Merry, *Women Military Pilots of World War II*, 52.

²⁶⁹ “Mum’s de Woid for Fifinella,” *The Avenger*, October 22, 1943, 3.

²⁷⁰ Landdeck, *The Women with Silver Wings*, 146.

relationships at the time.²⁷¹ While the findings of this report were not made public, the flow of rumors that plagued the WFTD and WASP about prostitution or lesbianism did not stop. Cochran seemed more content with hiding the women away from the press and keeping them quiet than making any public announcement that dissuaded the rumors.

The rumors unfortunately grew to the point that Cochran had no choice but to allow the media coverage of her groups by the time the first WFTD class graduated. But it was too late, the damage was already done to the reputation of both groups. Once Cochran allowed some publicity around the women, many of the reporters that questioned the WASP were completely unaware of what the women's roles were in the organization. The reporters instead focused on asking questions about dating, what type of makeup they used that stayed fresh in the air, and how they applied their lipstick.²⁷² This disparity between the general public's knowledge of the WASP program and what the women did to support the war effort showed that the average American was more concerned about how women behaved in a military setting and if they maintained traditional gender roles.

Compensation rates for the WAFS and WASP groups were another indicative feature of their gender-based roles within America's wartime society, and it was certainly rife with controversy. Like the British ATA, women in the WAFS received lower compensation rates than their male counterparts and were paid \$6 a day that accumulated to \$3000 per year.²⁷³ Despite this similarity, there was no public effort or any discussions

²⁷¹ Merry, *Women Military Pilots of World War II*, 61-62.

²⁷² Cochran and Brinley, *Jackie Cochran*, 212-214; Landdeck, *The Women with Silver Wings* 150-151; Rickman, *Betty Gillies, WAFS Pilot*, 111.

²⁷³ Landdeck, *The Women with Silver Wings*, 28; Rickman, *Finding Dorothy Scott*, 40; Merry, *Women Military Pilots of World War II*, 49.

behind the curtain about plans to increase the WAFS wages to match male ferry pilots. This lack of effort was because WAFS pilots were already economic and social elites in American society that had no intention of earning a livable wage from their position. This is easily surmised from the initial twenty-eight WAFS members who clearly possessed extended hours of flight time and matched Love's desire for an elite group of female pilots.²⁷⁴ In other words, Love's requirements for the WAFS were difficult to fulfill for middle-class women who lacked the necessary funds to attain flying skills that only high-class women had between the 1930s and 1940s.

The WASP's establishment changed the way women pilots were paid during the war, but this in turn created drastic issues that downplayed the significance of this change. The base pay for women in the WASP was \$250 while stationed at an airfield and they were compensated \$6 a day on ferrying trips by the Civil Service. This was a significant pay raise from the WAFS compared to male ferry pilots who received \$150 to \$200 on the field depending on their rank.²⁷⁵ However, this in turn created issues where WASP members were not offered a significant number of military benefits provided to male pilots. These women were not offered housing, flight pay, or a uniform allowance despite their similar workload to male pilots in the USAAF.²⁷⁶ WASP members were stuck in a confusing position as quasi-military personnel; they performed similar ferrying work as the male military pilots they relieved but they were not offered any of the benefits for their work.

²⁷⁴ Rickman, *Finding Dorothy Scott*, 33-34; Merry, *Women Military Pilots of World War II*, 37; Schrader, "Winged Auxiliaries," 190.

²⁷⁵ Wings Across America, "STATS;" Darr, "The Long Flight Home;" Merry, *Women Military Pilots of World War II*, 49.

²⁷⁶ Wings Across America, "STATS;" Hodgson, *Winning My Wings*, 124; Merry, *Women Military Pilots of World War II*, 49.

The largest offense to the WASP was that the USAAF and the Civil Service did not offer them any health insurance or funerary coverage. This in turn forced WASP members to pay for health insurance and their deceased comrades' funerary arrangements out of their own pockets with a "Cadet Fund" that the women pooled together in case of medical emergencies.²⁷⁷ Many within the WASP were frustrated by this inequality, and they were determined to make a big announcement publicly about the issue, but they were unfortunately sworn to silence by Cochran for the sake of saving the WASP's reputation in the American public eye. Regardless of Cochran's warnings, there were a select few women who disobeyed her orders towards the end of the program and contacted their state representatives, along with USAAF headquarters, to offer their support towards the WASP militarization bills. In this case, the WASP's determination to demand for gendered equality as a militarized unit was no match for Cochran's goals to maintain the unit's reputation by conforming them with American ideas of traditional femininity.²⁷⁸

America itself was fertile ground for gendered controversy because of these ideas and Americans created a grueling situation for women pilots out of all the other female aviation groups during the war. Men in the USAAF and unemployed aviators were commonly the worst offenders toward the WASP on two different levels.²⁷⁹ First, USAAF commanding officers used female aviators to emasculate other men who complained about piloting heavier aircraft. The WASP were essentially used as guinea

²⁷⁷ Ann Darr, "The Women Who Flew - but Kept Silent: They did Endless 'Aerial Dishwashery' but were Denied Even the Name 'Veteran!'" *New York Times*, May 7, 1995; Landdeck, *The Women with Silver Wings*, 115, 124, 135.

²⁷⁸ Darr, "The Long Flight Home;" Landdeck, *The Women with Silver Wings*, 190, 192, 195, 239.

²⁷⁹ Merry, *Women Military Pilots of World War II*, 69-72.

pigs to motivate men who fell out of line, no matter if they were done with good intentions or not.²⁸⁰ Commanding officers also had the power to prevent WASP members from ferrying planes outside of the U.S. which was already an opportunity that rarely occurred. The most disheartening example of this was when General Arnold cancelled Nancy Love's and Betty Gillies' transoceanic delivery of a B-17 bomber, nicknamed the "Queen Bee," to England in September 1943.²⁸¹ Gillies disappointingly noted in her diary later that "a male pilot and copilot were being sent to take our ship on! Our B-17 was going to England without us. That was a war zone."²⁸² Love and Gillies would have made history as the first WASP members to conduct a transoceanic flight during the war if General Arnold was not so critical about the idea of women flying overseas into a war zone.

Male aviators also orchestrated public smear campaigns against female pilots since their first formation in 1942. Unemployed male pilots were the ones who mostly promoted this anti-WASP rhetoric as they played on the concerns of other male pilots and the American public over women's roles after the war. These unemployed pilots were men who worked in the War Training Service (WTS) related to combat training or aircrew training, but their groups were shut down to bolster foot soldier numbers for the U.S. Army. Most of the time, these men raised their complaints towards the media and Congress about how it was unfair that WASP members were recommended to receive military status while they lost their future jobs.²⁸³ They made different claims to propose

²⁸⁰ Darr, "The Long Flight Home;" Landdeck, *The Women with Silver Wings*, 175-176, 200-205; Merry, *Women Military Pilots of World War II*, 94; Rickman, *Betty Gillies, WAFS Pilot*, 71-74; Simbeck, *Daughter of the Air*, 160.

²⁸¹ Landdeck, *The Women with Silver Wings*, 176-177; Rickman, *Betty Gillies, WAFS Pilot*, 71-74.

²⁸² Rickman, *Betty Gillies, WAFS Pilot*, 72.

²⁸³ *Ibid.*, 103-104; Landdeck, *The Women with Silver Wings*, 190-192.

that the WASP defied social norms for women in that they were either immoral or became too masculine as pilots, but most of the slander claimed that women pilots took aviation jobs away from men who needed them.²⁸⁴

Male opposition to the WASP was at an all-time high, but there were also many men within the USAAF and the Ferrying Division who did support women pilots. These men appreciated women in the WASP for their knowledge in aviation because they could not maintain similar conversations with women that worked outside of aviation. Women pilots just seemed to appeal more to men because they understood the world of aviation as equals.²⁸⁵ This appreciation and equality can be surmised from one of Dorothy Scott's letters home where she wrote that "several officers have told us we're 'just like the fellows' and we do need that rating [on our conduct]!"²⁸⁶ For many women, having the men to support them helped boost their morale when the WASP was such a controversial organization to the American public.

There were also some cases of men who expressed their amazement over how WASP members handled heavier and more dangerous planes than what they were used to. For example, on August 2, 1995, WASP veteran Dora Dougherty Strother received a letter from one Harry McKeown who was once the Director of Maintenance and Supply and Base Test Pilot at Clovis Air Force Base in 1944. McKeown's letter to Strother was one that expressed great appreciation to her for inspiring the men at Clovis to fly the heavy four-engine B-29 Superfortress when many of them were too afraid to pilot the

²⁸⁴ Darr, "The Women Who Flew - but Kept Silent;" Landdeck, *The Women with Silver Wings*, 155-156, 190-192, 194-195, 211, 212, 266-268; Merry, *Women Military Pilots of World War II*, 70-71; Schrader, "Winged Auxiliaries," 196.

²⁸⁵ Merry, *Women Military Pilots of World War II*, 71-72; "Women Better Pilots than Men, Noted Designer Declares," *The Avenger*, October 22, 1943, 3.

²⁸⁶ Rickman, *Finding Dorothy Scott*, 53.

difficult aircraft. But one aspect to note about McKeown's letter was that it contained an underlying back-handed "compliment" where he wrote: "You were the pilot that day and demonstrated your excellent flying skills and convinced us the B-29 was the plane that any pilot could be proud to fly. From that day on we never had a pilot who didn't want to fly the B-29."²⁸⁷ Unfortunately, men who appreciated women pilots were something of a rarity by 1944 as they were gradually overshadowed by men from the WTS who supported rumormongering among the American public.

Unfortunately, the claim that women pilots stole aviation jobs from male pilots caught significant traction in 1944 as the war slowly wound down and USAAF combat pilots were recalled to the U.S. while Congress debated over the formal militarization of the WASP.²⁸⁸ There were moments of pushback from WASP supporters, and one prominent supporter was Brigadier General Robert E. Nowland, the new Ferrying Division commander after General Tunner. General Nowland made a case about the WASP's expenditure to General Arnold on November 1, 1944, where he argued that "the cost of training a fighter pilot at the 4th OUT is approximately \$9,336.00, or \$1,085,312 for the 117 replacements required upon the discharge of the WASPs. . . . These pilots, even after training, will not be as efficient, due to lack of experience, as are the WASPs who have been specializing in this type of flying over a period of eighteen months."²⁸⁹ General Nowland's argument did not attract enough attention and Congress remained set

²⁸⁷ Harry McKeown, "Letter from B-29 Pilot," WASP WWII Records, Wings Across America, last accessed October 5, 2022, http://www.wingsacrossamerica.us/wasp/b29_letter.htm.

²⁸⁸ Landdeck, *The Women with Silver Wings*, 192-193, 195, 214; Leonhirth, "Tennessee's Experiment," 177.

²⁸⁹ Robert E. Nowland, "'Secret Memorandum' to Commanding General, Air Transport Command," Press Archive, Wings Across America, last accessed October 5, 2022, http://wingsacrossamerica.us/records_all/press_archive/nowland.pdf.

on the idea that the WASP program was too costly to maintain.²⁹⁰ WASP members knew that commanding officers and the WTS used American gender norms to their advantage, and while the women were restricted to object to this abuse, they continued to prove themselves as aviators with their accomplishments. Men from the WTS, however, won over the American public and successfully established a negative perception of the WASP.

The defeat of the Costello bills directly signaled the oncoming end of the WASP program as matters and business regarding their functions slowly declined throughout 1944. Subsequently, General Arnold ceased all training activities for women pilots after June 26, 1944, where it was reported that his decision was “based on the rejection by the House of Representatives . . . of the Costello bill to give members of the Wasp the status of commissioned officers in the Army.”²⁹¹ This news greatly upset Cochran as she felt her control over the WASP was threatened; she demanded Congress for a restoration of the training program and legislation to give women pilots military status. Cochran was also fixed on pressing for these demands with a report to General Arnold on August 1, 1944, that summarized the WASP’s contributions throughout the war.²⁹² However, Cochran made a grave error in this report when she provided an ultimatum to General Arnold and Congress that stated if the WASP could not be militarized then “the only alternative . . . was [the] ‘inactivation of the Wasp program.’”²⁹³ Cochran’s determination was relentless in fighting for the WASP program, and she made many arguments for

²⁹⁰ Landdeck, *The Women with Silver Wings*, 212; Rickman, *Betty Gillies, WAFS Pilot*, 106-107, 115-116, 117.

²⁹¹ “WASP Training Set to End: Gen. Arnold Says House Action Will End Program Soon,” *New York Times*, June 27, 1944.

²⁹² Landdeck, *The Women with Silver Wings*, 229-230.

²⁹³ “Army Status Asked for Women Pilots: Miss Cochran in Wasp Report to Arnold Gives Alternative to Discontinuing,” *New York Times*, August 7, 1944.

women pilots, yet her resolve mixed with her hubris led to the downfall of the WASP before the war's conclusion.

Congress agreed to Cochran's alternative suggestion and favored the inactivation of the WASP program because of numerous factors by October 1944. The projected numbers for dead American pilots overseas never came to pass, gender biased pressure from male pilots in the WTS doubled their efforts in the media, and not enough members of the WASP came forward to voice their opinion on the Costello Bill while it was debated. To Congress and the USAAF, the WASP were seen as expendable and no longer needed.²⁹⁴ WASP members were then sent letters by General Arnold, followed by Cochran, informing the women of the circumstances that led to their disbandment, congratulated them for their work, and warned them that the WASP program would deactivate on December 20, 1944.²⁹⁵

At this point in the war, no amount of perseverance from the women pilots could have changed the course of their disbandment by proving their worth with their work. It was simply too late for them, and on December 19, 1944, the WASP's Officer Club burnt down in flames with no casualties because of a mysterious fire. As the women watched the Officer Club burn to ashes, many of them could not help but feel like their future went along with it and that there would be no place for women with their skills in a post-war American military.²⁹⁶ In many ways, they were correct about their near future, but December 20 did not mark the end for the WASP members as they found another chance to change their fate fifty years after the war.

²⁹⁴ Bruce D. Callander, "The WASPs," *Air Force Magazine* 84, no. 4 (2001): 72; Rickman, *Betty Gillies, WAFS Pilot*, 136-137, 140-143.

²⁹⁵ Darr, "The Long Flight Home."

²⁹⁶ Rickman, *Betty Gillies, WAFS Pilot*, 153-154.

CONCLUSION: POSTWAR ACTIVITIES AND THE SIGNIFICANCE OF THE PILOTS

As the end of World War II approached, 1944 became the most significant year of the war because it established a key turning point for the Allies after they made decisive gains against the Axis Powers on all fronts, and it made the decisive push towards victory. The final years of World War II did more than just signal a significant change for the world; it also marked the end for many of the Allied women's aviation units. The statistical outcome of the war was widely different from what military strategists initially thought as mortality rates were recorded lower than what was anticipated by 1944.²⁹⁷ These irregularities with predicted figures opened a larger discussion regarding women pilots and their place in military aviation among aviation ministers, military officers, and politicians across the main three Allied countries.

The question was simple for these countries: should the military retain women as civilian and military pilots as they had during the war? Much debate surrounded the question, but the answer from each of these countries was that women did not have a place in military aviation nor in auxiliary positions unless another massive war dictated it necessary. The outstanding accomplishments these women achieved and the gendered barriers they broke were not enough to convince high-ranking officials that a woman

²⁹⁷ Lois K. Merry, *Women Military Pilots of World War II: A History with Biographies of American, British, Russian and Germany Aviators* (North Carolina: McFarland & Company, Inc., 2011), 116; Giles Whittell, *Spitfire Women of World War II* (London: Harper Perennial, 2007), 265-266.

should stay in a traditionally male career like military aviation. The result of the Allies' patriarchal traditions led to the inevitable disbandment of each of the women's pilot groups towards the end of World War II because they were deemed unnecessary for the upcoming postwar years.

The aftermath of the women pilots' disbandment is a topic that is usually left as an afterthought or for postwar historians to explore, but it is equally an important topic as the rest of the groups' histories. The women's reactions to their disbandment and what happened to them afterward can at best be surmised from their own individual postwar writings. There was no singular feeling that represented the reactions of the women upon the discovery of their disbandment, their feelings at the time were complex and varied due to conflicting circumstances between their values and the work they accomplished as pilots. Most women were overjoyed that the war was over and returned to their prewar lives, even if things did not feel the same for some of those women, while many others wanted to continue flying for the military as either civilian or military pilots. Needless to say, World War II and its outcome undoubtedly changed women pilot's lives no matter what path they took for their future, and it is worth expanding upon for their impact on both modern military history and women's history.

Although women pilots in the United States were the last to assemble their groups among the Allies, they became the first of the women pilot groups to disband on December 1944 with an unceremonious end. On top of their disbandment, members of the Women Airforce Service Pilots (WASP) program were denied any veteran status and benefits from the army just as they were not offered the same pay as male pilots or any funerary expenses upon their death. The closest benefit that members of the WASP

received was that those who completed their training in the Women's Flying Training Detachment (WFTD) received an official commercial aviation license from the Civil Aeronautics Administration (CAA), but this only came to pass after Cochran negotiated with the CAA to grant the licenses in the first place.²⁹⁸ Cochran failed to make any progress on the WASP militarization bill in 1944, but she at least helped many of the WASP members gain a chance to pursue a career in aviation with these negotiations. Unfortunately for Cochran, and many of the WASP pilots, these negotiations were mostly accomplished in vain as America headed into a postwar aviation world that was predominantly comprised of male pilots.

As WASP members returned home to civilian life, many of them faced a troubling concern about their place in American society. A direct consequence of disbanding the WASP program by the end of 1944 caused many of the women to feel as if they lived aimless lives after flying for the military.²⁹⁹ While this might seem like an exaggeration, there was merit to their feelings as the war still had six months left with the Americans pushing back against both Germany and the Japanese.³⁰⁰ Many of the women pilots in this respect still felt like they were prematurely dismissed from their wartime roles. Determination once again played a key factor here as some of the former WASP members attempted to find other aviation roles to assist with the war effort, but they were met with minimal success.

For example, the best chance that American women pilots had to aid the war

²⁹⁸ Katherine Sharp Landdeck, *The Women with Silver Wings: The Inspiring True Story of the Women Airforce Service Pilots of World War II* (New York: Crown Publishing, 2021), 236-237.

²⁹⁹ *Ibid.*, 253-254, 255; Ann Darr, "The Women Who Flew - but Kept Silent: They did Endless 'Aerial Dishwashery' but were Denied Even the Name 'Veteran!'" *New York Times*, May 7, 1995.

³⁰⁰ Zeiler, *Annihilation*, 326, 361.

effort was to fly as ferry pilots for the Chinese Air Force since Japan still had a heavy presence in China. This endeavor was pursued by former WASP member Hazel Ah Ying Lee after she learned that her husband, Yin Cheung Louie, a Major within the Chinese Air Force, was recruiting women pilots for the Chinese. Only a few members of the WASP, like Teresa James, took Lee up on her offer and prepared to join the Chinese Air Force, but this opportunity never came to pass as Lee lost contact with her husband while he flew in China.³⁰¹ Another unfortunate incident that hindered this opportunity was Lee's death after she was caught in a collision between two landing P-63s, one of which she was flying, that resulted in an explosion; Lee thus became the last WASP member to die while in service.³⁰²

Once World War II was declared over after V-J Day, many members of the WASP program soon faded into obscurity as they settled back into civilian life. American women pilots, along with other women pilots all over the world, found it difficult to pursue a career in aviation since many aviation companies and airlines did not accept the idea of women flying as commercial pilots. The closest aviation work that WASP veterans found were roles with nonflying duties such as flight attendants. Aviation companies by the late 1940s and early 1950s thought that the role was more fitting for women, and it comforted passengers who were not used to the sight of a woman flying a commercial plane. Other WASP veterans signed up for nonflying reserve units in various U.S. armed forces like the Navy or the Air Force Action Reserve, but this yielded little

³⁰¹ "Women Airforce Service Pilot Hazel Ying Lee," The War - Articles, The National WWII Museum | New Orleans, last accessed November 30, 2022,

<https://www.nationalww2museum.org/war/articles/women-airforce-service-pilot-hazel-ying-lee>.

³⁰² "Hazel Ying Lee: The First Female Chinese-American Pilot," Aerospace Pioneers, Federal Aviation Administration, last accessed November 30, 2022,

https://www.faa.gov/about/history/pioneers/media/Hazel_Ying_Lee.pdf; Landdeck, *The Women with Silver Wings*, 237-238, 240-241.

results after the Army Air Force ruled that women would never serve as military pilots.³⁰³

The discrimination against women pilots in the U.S. dealt a heavy blow to most veteran WASP members that wished to continue a career in aviation. Several of these female pilots suffered through depressive episodes because of the disparity of postwar aviation work that was available for women and the discouragement from men who were close to these women. Nancy Love attempted to find a career in aviation early on, but she was also unable to find any work like most, despite her reputation, and instead focused on her family. It was such a traumatic situation that WASP veterans Helen Richey, Mary Wiggins, and Paula Loop each committed suicide because they could not manage their postwar transition.³⁰⁴ Relatively few WASP veterans found successful aviation roles in the postwar world that varied from their own aviation companies, missionary organizations, and helicopter aviation companies. Some WASP members, such as Ruth Shafer and Dora Dougherty Strother, were also fortunate to find successful and rewarding careers as air traffic controllers or flight instructors as early as 1945.³⁰⁵

Jacqueline Cochran, in contrast with most of the women, was able to maintain a strong presence in aviation circles as she continued to live a highly competitive lifestyle through air races and breaking records despite her personal health issues. More importantly, Cochran became famous as the first woman to break the sound barrier three

³⁰³ Deborah G. Douglas, *American Women and Flight since 1940* (Kentucky: The University Press of Kentucky, 2004), 112-113, 123-124, 127-128; Landdeck, *The Women with Silver Wings*, 257, 263-264, 270-271 292-293; Merry, *Women Military Pilots of World War II*, 126; Amy Goodpaster Strebe, *Flying for Her Country: The American and Soviet Women Military Pilots of World War II* (Westport: Praeger Security International, 2007), 68-69.

³⁰⁴ "Finale to the Mary Wiggins Story," *The WASP Newsletter: Official Publication of the Women Airforce Service Pilots, WWII* 23, no. 3 (1986): 46; Landdeck, *The Women with Silver Wings*, 264-265, 268-269, 290-291; Merry, *Women Military Pilots of World War II*, 121; Strebe, *Flying for Her Country*, 67-68.

³⁰⁵ Barbara Ganson, *Texas Takes Wing: A Century of Flight in the Lone Star State* (Austin: University of Texas Press, 2014), 120, 140-141.

separate times in a Canadair F-86 Sabre jet in May 1953.³⁰⁶ While Cochran was the exception among WASP veterans, many of them were unable to find any future in aviation and it appeared that their contributions to the war effort were quickly forgotten by both the public and military. Their wartime efforts were mainly forgotten because WASP veterans did not want to talk about their experiences as pilots during the war and they believed that no one was interested in listening to their story. What perhaps attributed to this idea was that some of the tragedies they experienced were perhaps too painful to recount and were also the result of Post-Traumatic Stress Disorder. Only one WASP veteran, Marty Wyall, preserved the history of the program for years after their disbandment by collecting WASP records, papers, and paraphernalia while she maintained connections with other WASP veterans.³⁰⁷ The women's story within the WASP program were largely unknown until the 1970s caused a sudden resurgence of WASP exposure to the American public thanks to Wyall's preservation efforts.

As the U.S. entered the 1970s, the climate of the period in favor of women's rights provided an air of opportunity for the older WASP veterans to make a claim for military veteran status that was never granted to them for their service. At the time, the U.S. warmed up to the idea of women within the military thanks to contributions from women pilots and nurses during the Vietnam War, which gave them a foothold to enter

³⁰⁶ Jacqueline Cochran and Maryann Bucknum Brinley, *Jackie Cochran: The Autobiography of the Greatest Woman Pilot in Aviation History* (New York: Bantam Books, 1987), 278, 308; Douglas, *American Women and Flight since 1940*, 130-132; Landdeck, *The Women with Silver Wings*, 275-276; Jackie Moggridge, *Spitfire Girl: My Life in the Sky* (London: Head of Zeus Ltd.), 172; Strebe, *Flying for Her Country*, 75-76.

³⁰⁷ Helen Snapp, "Oral History of a WASP," in *American Working Women in World War II: A Brief History with Documents*, ed. Lynn Dumenil (Boston, MA: Bedford/St. Martin's, 2020), 139-140; Landdeck, *The Women with Silver Wings*, 284-288, 290.

the military.³⁰⁸ At this point in their lives, the WASP veterans joined the second wave of feminism and used their experiences as World War II era pilots not just to assist the feminist movement for the first time, but to gain recognition for their efforts in history. This movement in turn spawned discussion over the WASP veteran's status where the U.S. Congress debated whether the women were truly civilian pilots or if they were soldiers in everything but name during World War II.

The argument was relatively the same as when the Costello Bill argued for WASP militarization in 1944, but the key difference that gave the WASP veterans a chance was that they were older, wiser, unconstrained, and more politically knowledgeable than they were in 1944.³⁰⁹ Numerous hearings held in Congress, with a countless number of WASP veterans who provided testimony, eventually resulted in the successful passing of H.R. 8701, the GI Bill Improvement Act of 1977, on November 23, 1977. The bill itself was a general improvement towards U.S. veteran benefits and it included an amendment that granted veteran status and certain benefits for all WASP veterans.³¹⁰ However, unlike the U.S., women pilots in Britain and the Soviet Union did not experience a similar underdog story of recognition after they were disbanded and many, if not all, fell back into domestic life.

The Women's Section of Britain's Air Transport Auxiliary (ATA) was the next women's pilot group to close after their program was officially deactivated by the British

³⁰⁸ Douglas, *American Women and Flight since 1940*, 167, 169-170, 172; Landdeck, *The Women with Silver Wings*, 302; Merry, *Women Military Pilots of World War II*, 132; Strebe, *Flying for Her Country*, 77.

³⁰⁹ Douglas, *American Women and Flight since 1940*, 166-170; Ganson, *Texas Takes Wing*, 142; Landdeck, *The Women with Silver Wings*, 299, 300-306, 307-318; Merry, *Women Military Pilots of World War II*, 132-134.

³¹⁰ Jimmy Carter, "GI Bill Improvement Act of 1977 Statement on Signing H.R. 8701 Into Law," November 23, 1977, The American Presidency Project, accessed December 2, 2022, <https://www.presidency.ucsb.edu/documents/gi-bill-improvement-act-1977-statement-signing-hr-8701-into-law>.

Overseas Airways Corporation (BOAC) on November 30, 1945. Before their dismissal, women pilots in the ATA held different expectations from Americans about their postwar activities where they eagerly anticipated a return to civilian life thanks to Pauline Gower's indications that such an event would occur.³¹¹ Unfortunately for the women, their expectations did not alleviate the sadness they felt once the Women's Section closed as Lettice Curtis recounted that "to those of us who had nothing to go back to and nowhere particular to go . . . the end of the war was as climacteric an experience as the outbreak."³¹² Few hoped to continue a career in aviation, but they came to similar solutions that American women had: to work as airline attendants, sign up for reserve units, or build their own aviation businesses to continue flying. The only difference from the U.S. in this regard was that aviation was far more popular and well-funded in Britain; the market was oversaturated with large businesses that toppled the smaller ones created by former ATA women.³¹³ There was simply too much air traffic in Britain to run a small business effectively and properly operate aircraft successfully.

While a vast majority of British ATA women returned to civilian life and settled with their new families, there were a few ATA women who pursued a career in aviation through alternate methods that were not available in Britain. Jackie Moggridge was one former ATA pilot who was hired by Air Services, an independent British airline company, in 1953 to ferry de Havilland Vampire jets and Spitfires from Cyprus to Burma. Israel at the time was engaged in a second war with Arabia during the Cold War and was building its own air force by purchasing military aircraft from the British to gain

³¹¹ Merry, *Women Military Pilots of World War II*, 123-124, 130; Giles Whittell, *Spitfire Women of World War II* (London: Harper Perennial, 2007), 265-266, 269-272.

³¹² Whittell, *Spitfire Women of World War II*, 269.

³¹³ Merry, *Women Military Pilots of World War II*, 130-132; Moggridge, *Spitfire Girl*, 154-158, 178.

an edge in the war. Moggridge, along with a handful of British male pilots, were tasked with ferrying Spitfires under the guise of pilots hired by the Burmese Government to ferry the aircraft to Burma to avoid any association with the Israeli government.³¹⁴ Another instance of these rare alternative avenues was six years earlier in 1948 when former ATA pilots Freydis Leaf and Veronica Volkersz were hired to ferry Tempest fighter planes to Pakistan. Even earlier on by the end of 1945, Margot Dunhalde, the only Chilean pilot from the ATA, joined with the Free French where she served as France's first and only female pilot in Morocco until she returned to Chile in 1947 to work as an air traffic controller.³¹⁵ As expected for women pilots during the postwar period, these few women were the rare exception out of the majority of British ATA women and even their accomplishments were obscured over time.

Soviet women pilots in Aviation Group 122 and mixed gender units equally had a rough transition into postwar aviation with only a few exceptions. The order for demobilization was issued to the 122nd and mixed units immediately after Germany's surrender in May 1945 where a great majority of Soviet airwomen were stripped of their ranks and roles by the military. Despite their orders for demobilization, the regiments continued to operate while they were outside of Soviet territory in Germany, Hungary, Prussia, and the Baltic region. It was not until these regiments returned to Soviet bases or Soviet territory that they were completely demobilized. These instances did not occur for the 586th Fighter Aviation Regiment and the 46th Guards Night Bomber Aviation Regiment until the fall of 1945 while the 125th Guards Bomber Aviation Regiment

³¹⁴ Moggridge, *Spitfire Girl*, 177-203; Whittell, *Spitfire Women of World War II*, 273-276.

³¹⁵ BBC News. "Chile's First Female War Pilot Margot Duhalde Dies at 97." February 5, 2018. Last Accessed December 3, 2022, <https://www.bbc.com/news/world-latin-america-42954634>; Whittell, *Spitfire Women of World War II*, 276, 279.

continued to operate until February 1947.³¹⁶ While most Soviet women pilots were ecstatic to return to civilian life, those who were captured by the Germans or recorded as missing in action were charged as spies and detained in Soviet prison camps by the Soviet secret police. Luckily enough, most of these pilots were able to escape their captivity and return to civilian life with the help of Vasilii Stalin, Joseph Stalin's youngest son who was a pilot that empathized with many of the unfairly imprisoned pilots.³¹⁷

From this point onward, it appeared that only a select few Soviet women who had long-standing experience in aviation prewar service were able to maintain long-term careers as pilots in military aviation. Most Soviet airwomen who served in the war returned to work in civilian sectors where they made up 63 percent of the civilian workforce, or they chose traditional roles for women while others pursued educational careers in science and engineering by late 1945.³¹⁸ Furthermore, Soviet airwomen were silenced by Soviet propaganda about their wartime contributions as the Soviet Union returned to its pro-natal policies concerning women in the military, policies that the majority of Soviet women veterans supported in the postwar state. PTSD and war fatigue also significantly influenced the Soviet airwomen's decision against fighting for their rights and recognition as military pilots. Members of the 46th regiment were particularly affected by PTSD to the point that they lost control of their sleep schedules and was used as an excuse by Soviet aviation organizations to deny women aviation roles.³¹⁹ The

³¹⁶ Reina Pennington, *Wings, Women, & War: Soviet Airwomen in World War II Combat*. (Kansas: University Press of Kansas, 2001), 143, 146-148; Strebe, *Flying for Her Country*, 70-71.

³¹⁷ Lyuba Vinogradova, *Defending the Motherland: The Soviet Women Who Fought Hitler's Aces* (New York: MacLehose Press, 2015), 175-176, 293.

³¹⁸ Pennington, *Wings, Women, & War*, 144-145, 147-151.

³¹⁹ *Ibid.*, 145-146, 157-158; Nina Raspopova, "46th Guards Bomber Regiment," in *A Dance with Death: Soviet Airwomen in World War II*, ed. Anne Noggle (College Station: Texas A&M University Press, 1994),

122nd's story tragically ended with a whimper after World War II and it was buried in history until the fall of the Soviet Union in 1991. Soviet women never again made strong strides in aviation like the 122nd had throughout Soviet history, the only exception was Valentina Tereshkova who was one of the first women launched into space by the Soviets in 1963.³²⁰ Even in recent years, Russian aviation has not made progressive strides for women to participate in combat roles like in Britain and the U.S. as Russian women are actively dissuaded from pursuing a career in the military unless absolutely demanded by war.³²¹

Each of these three respective women's aviation groups were motivated by different factors that played a pivotal role in their formation, length of operations, and disbandment. The ATA underlined patriotic determination in their exploits as British women, and some American volunteers, understood that ending the war was the priority for Britain's survival. Aviation Group 122 was established within the Soviet Union because women insisted on carrying out their vengeance towards Germany whether Soviet Command approved it or not. Lastly, the WAFS, WFTD, and WASPs faced many challenges to their program without any government or military aid, but they were self-reliant in their roles because they wanted to aid the American war effort through aviation and bolster the number of American soldiers on the warfront.

Motivation is an important psychological element to consider when it comes to history as it is underrepresented or brushed over too often in historical studies, unless it

26; Mariya Smirnova, "46th Guards Bomber Regiment," in *A Dance with Death*, ed. Anne Noggle, 37; Strebe, *Flying for Her Country*, 72-73.

³²⁰ Douglas, *American Women and Flight since 1940*, 152.

³²¹ Merry, *Women Military Pilots of World War II*, 121-122; Pennington, *Wings, Women, & War*, 143-146, 153-160; Strebe, *Flying for Her Country*, 71-74, 79-81.

concerns biographical works, that is. This same issue is identified in the history of World War II era women pilots as it was stated earlier how the little works that do exist in the historiography focus more on their overall impact on the war or their significance to women's studies. The history of World War II is much more than a record of battles and treaties that occurred during the middle of the twentieth century, as is the common issue in military history. World War II, on a deeper level, is a history of complex feelings, beliefs, and motives that propelled people into the positions they fulfilled. As such, it requires historians to put aside the more appealing side of World War II history in order to obtain a deeper understanding of the people that initiated, participated, and concluded one of history's darkest conflicts. Motivation and determination reveal how historical figures were pushed beyond the boundaries of their initial involvement in historical events and it informs the audience how a strong will shaped the events that are well-known to this day.

In a sense, these three groups of women pilots were the most progressive aviation units to exist alongside the African American Tuskegee Airmen unit during World War II because of their determination. However, it is important to emphasize that the creation of these units and the establishment of women in military aviation was not for the purpose of creating a feminist movement. Their main concern was to assist in any way they could and end the war despite unconsciously delivering a feminist message about women's roles in the military. Such a relatively selfish objective during a time of large-scale conflict and suffering would have surely received negative reception towards the units and a quicker disbandment, if not an outright refusal of activation in the first place. The only time that these women pilots pursued a feminist mission as a collective whole was

when the WASP veterans contributed to America's second wave of feminism in the 1970s and helped future women pilots to officially enter the military.

Like Helena P. Schrader, Amy Goodpaster Strebe, and Lois K. Merry have argued, these women require a deep analysis as a collective whole to provide the proper attention they deserve for their contributions to the Allies during World War II. Their support enabled the Allies to gain an upper hand against the Axis Powers who did not utilize women pilots within their militaries, except for Germany's Hanna Reitsch and Melitta von Strauffenberg. The inclusion of women in World War II aviation roles was a notable contribution to the Allied war effort along the same lines as the Women's Army Corps, the Women Accepted for Volunteer Emergency Service, and the women who worked in weapons production and fought in combat roles. Women pilots were no different from these other women groups in terms of their impact on the war and they equally contributed their personal strengths through different avenues to aid the war effort as a massive mobilization effort. However, there is no denying the influence that these women left on modern military history and women's history; whether they were restricted to civilian roles or granted the freedom to become combat pilots, they proved their mettle in a complex period of global conflict and serve as inspiration to many pilots today.

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