Contents

List of Illustrations vii
Foreword by William F. Trimble xi
Series Editors’ Preface xiii
Acknowledgments xv
A Note on the Text xvii
Abbreviations xix

Introduction 1

1 Training with the First Yale Unit
March–September 1917 21

2 Early Days in Europe
September–December 1917 43

3 With the RFC at Gosport, Turnberry, and Ayr
December 1917–March 1918 87

4 On Patrol—At NAS Dunkirk and with the RAF in Flanders
March–May 1918 141

5 The Navy’s Big Show—The Northern Bombing Group
May–August 1918 183

6 Hero of the Angry Sky—Serving with No. 213 Squadron
August–October 1918 215

7 Eastleigh and Home
October–December 1918 285

8 A Glance Back
June 1924 313

Afterword 327
## Contents

Appendix 1: David Ingalls’s Victories with No. 213 Squadron, RAF  337  
Appendix 2: David Ingalls’s Technical Notes, Turnberry, Scotland  339  
Bibliography  363  
Index  369
Introduction

In 1925, Rear Admiral William S. Sims, commander of U.S. naval forces operating in Europe during World War I, declared, “Lieutenant David S. Ingalls may rightly be called the ‘Naval Ace’ of the war.” Of the twenty thousand pilots, observers, ground officers, mechanics, and construction workers who served overseas in the conflict, only Ingalls earned that unofficial yet esteemed status. In contrast, by November 1918, the U.S. Army Air Service counted more than 120 aces.

The Cleveland, Ohio, native’s unique achievement resulted from several factors. Unlike their army peers, few naval pilots engaged in air-to-air combat. Instead, most patrolled uncontested waters in search of submarines. A bare handful served with Allied squadrons along the Western Front, the true cauldron of the air war. By contrast, David Ingalls spent much of his flying career stationed at NAS Dunkirk, the navy’s embattled base situated just behind enemy lines, or carrying out missions with Royal Air Force (RAF) fighting and bombing squadrons. He did three tours with the British, all without a parachute or other safety gear, and he hungered for more. The young aviator managed to be in the right place at the right time, and as was true for nearly all surviving aces, luck smiled on him.

David Ingalls’s personal attributes played a crucial role in his success. A gifted athlete, he possessed extraordinary eyesight, hand-eye

2. Ingalls was one of a small but distinguished group of Ohio aviation heroes that included Eddie Rickenbacker, the former race car driver from Columbus who ended the war as America’s “ace of aces”; William Lambert from Ironton; Charles Bissonette from Toledo; and James Knowles from Cincinnati. Prominent naval aviators Robert Ireland and John Vorys hailed from Cleveland and Cincinnati, respectively.
coordination, strength, agility, and endurance. An instinctive, confident flier, Ingalls learned quickly and loved the aerial environment. With a head for detail, he easily mastered the many technical facets of his craft. He was also an excellent shot and unforgiving hunter. Finally, Ingalls possessed the heart of a youthful daredevil, a hell-raiser who glowed in the excitement and challenge of aerial combat. He seemed fearless and quickly put one day’s activities behind him even as he prepared for the next mission. He went to war a schoolboy athlete and came home a national hero. And he was still only nineteen years old when the guns fell silent.

Although Ingalls’s wartime experiences are compelling at a personal level, they also illuminate the larger but still relatively unexplored realm of early U.S. naval aviation. According to military historians R. D. Layman and John Abbatiello, naval aviation carried out a wide variety of missions in World War I and exercised far greater influence on the conduct of military affairs than heretofore acknowledged. Aircraft protected convoys from attack and played an increasingly vital role in the campaign against the U-boat. Aviators aided the efforts of naval units and ground troops in military theaters extending from the North Sea and English Channel to Flanders, Italy, Greece, Turkey, and Iraq. Fleet commands, most notably in Great Britain, worked to integrate the new technology into ongoing operations and develop innovative applications.3

As the United States developed its own aviation priorities, missions, and doctrines during 1917 and 1918, it aspired to similar success. Despite his extreme youth, David Ingalls was repeatedly selected by the navy to play a pathbreaking role in this process. He began as one of the very first pilots dispatched to Europe for active duty “over there.” Once ashore, he became one of only three aviators chosen to receive advanced training at Britain’s School of Special Flying at Gosport, preparatory to assuming the role of flight commander at beleaguered NAS Dunkirk. During the terrifying German advance of March–April 1918, he and three other American pilots joined a Royal Air Force fighting squadron operating

---

over Flanders. Later that year, he became one of the initial members of the navy’s most significant offensive program of the entire war, the Northern Bombing Group (NBG), and then flew several bombing missions with the RAF. After just a few weeks’ ground duty with the NBG, Ingalls returned to British service for two months, becoming the only navy pilot to fly over the front lines for such an extended period. While with the RAF, he served as acting flight commander ahead of many longtime members of his squadron. In recognition of this work, he became the first American naval aviator to receive Britain’s Distinguished Flying Cross. He finished his service as chief flight officer at the navy’s sprawling assembly and repair depot at Eastleigh, England.

Ingalls’s wartime correspondence offers a rare personal view of the evolution of naval aviation during the war, both at home and abroad. There are no published biographies of navy combat fliers from this period, and just a handful of diaries and letters are in print, the last appearing in the early 1990s.\(^4\) Ingalls kept a detailed record of his wartime service in several forms, and his extensive and enthusiastic letters and diaries add significantly to historians’ store of available material. Shortly after enlisting in the navy in March 1917, he began corresponding with his parents in Cleveland, Ohio, a practice he continued until late November 1918. Someone in his father’s offices at the New York Central Railroad transcribed the handwritten letters and pasted them into a scrapbook containing materials documenting his military career.\(^5\)

Ingalls’s letters reveal a lighthearted and affectionate relationship with his parents, and they are often filled with valuable insights into the tasks he performed, though he shielded his folks from the true dangers he faced. He limned his most hair-raising experiences with the glow of a sports-writer discussing a star athlete’s exploits. Though the letters contain much information about his social life in Europe, the teenage flier did not tell his

---


5. The original handwritten letters have been lost, and typewritten copies contain a few transcription errors, corrected here.
mother about the “short arm” inspections he performed on enlisted men, searching for signs of venereal disease.

Upon sailing to Europe in September 1917, the recently commissioned junior officer commenced keeping a detailed diary, eventually filling two compact notebooks. Ingalls also compiled an informal record of his flight activities by jotting down spare notations throughout his diary, listing hours and types of aircraft flown. Surprisingly, no official logbook survives. These daily entries have a very different texture from that of his letters, being more matter-of-fact and more cryptic yet still recording the major and lesser activities that structured his days and the days of those around him. He expressed frustration with endless training, occasional boredom, dislike of army fliers, and hints of fear and nerves, an altogether less sugarcoated version of reality. While training in Scotland, the neophyte aviator transcribed lengthy notes during various lectures and from technical publications. He also produced a formal analysis of instruction at Ayr and Turnberry. Both are reproduced here.

Shortly after the war but likely no later than 1924, a more mature Ingalls prepared a hundred-page typescript memoir, incorporating much of the language of his diary and letters verbatim, interspersed with material reporting additional events, descriptions drawn from memory where no letters or diary entries survived, or editorial comments about his experiences. The memoir offers yet another interpretation of Ingalls’s activities, the tone by turns analytical and dramatic, with something of the flavor of a pulp novel. Wartime terror and boredom are gone, replaced by the occasional smirk or wink. His descriptions of social life and visits to nightclubs seem wiser, more knowing, as he speaks with the voice of a grown man recounting the escapades of a teenage boy.

Despite his officer status, Ingalls provided a distinctly civilian view of military life in his writings, albeit a rather privileged version of that existence. For him, this was all a great adventure, not a career. The navy’s decision to keep its regular young officers with the fleet and not train any as aviators meant volunteer reservists such as Ingalls filled the ranks of combat units.6

And like him, many came from affluent, socially prominent families. The young Ohioan thus had much to say about the social scene in London and Paris, and his experiences differed greatly from the hardships suffered by enlisted bluejackets at sea or doughboy infantrymen in the mud and trenches.

Ingalls’s story also, in the words of author Henry Berry in *Make the Kaiser Dance*, partakes of the persistent aura of glamour attached to the young Americans who flew their fragile, dangerous machines above the Western Front. Anyone who has ever raced across the sky in an open-cockpit biplane knows something of that feeling. Of Ingalls and his peers, Berry remarked, “Their names seem to conjure up the list of the romantic aspects of war—if shooting down another plane in flames, or suffering the same fate, is glamorous.” In a world of mud, horror, anonymity, and mass death, they became celebrities. The less-than-unbiased Gen. William “Billy” Mitchell proclaimed, “The only interest and romance in this war was in the air,” and historian Edward Coffman observed, “No other aspect of World War I so captured the public imagination.”

Concerning his aviation duties, Ingalls offered insight into the lengthy, varied, sometimes contradictory, and often ad hoc instruction received by the first wave of navy fliers preparing for wartime service. He bemoaned the fact that training never seemed to end. Reassignment from flying boat-patrol training, to land-based combat instruction, to seaplane escort duty, and to cross-lines bombing raids, followed by more escort duty, then training in large bombers, and finally assignment to a British combat squadron reflected the navy’s continually shifting plans and priorities. The fleet entered the war with no aviation doctrine, precious few men, and little matériel, and it took many months to get the program headed on a winning course. As Capt. Thomas Craven, commander of naval aviation in France in the final months of the conflict, noted, his bases and squadrons, like John Paul Jones, “had not yet begun to fight,” even as Germany prepared to surrender.

Among the first collegiate fliers to jump into the game, David Ingalls began training even before Congress declared war. In the months that

---


followed, he mastered command of flying boats, seaplanes, pursuit aircraft, and bombers, more than a dozen machines in all. Ingalls’s work took him from Florida to New York and then to England, Scotland, and France. He became a trailblazer for the many that followed, and his duties included antisubmarine patrols, bombing raids, test flights, at-sea rescues, dogfights, and low-level strafing attacks. In all his assignments, he displayed intelligence, exuberance, and technical skill. His superiors entrusted him with significant responsibility, and he more than fulfilled their expectations. Ingalls achieved great success in all his endeavors and despite his youth earned the praise, admiration, and respect of those around him. His experiences mirrored the course of the navy’s first venture into the crucible of aerial combat. David Ingalls’s story is naval aviation’s story.

By any reckoning, David Sinton Ingalls of Cleveland, Ohio, lived an extraordinary life. Long before he flew into aviation history, he seemed destined for high achievement. It was in his blood. Born into an affluent, socially and politically prominent midwestern family, he enjoyed great success as a youthful athlete. His exploits in World War I made him a national hero. The postwar era brought further accomplishments—degrees from Yale and Harvard; marriage to an heiress and a busy family life; a high-profile career in politics, law, business, and publishing; a busy and productive stint as undersecretary of the navy for aeronautics in the Hoover administration; distinguished military service in World War II; extensive activity as a sportsman and philanthropist; and a lifelong commitment to his passion for flying as both a pilot and an aviation enthusiast. And whatever activity he pursued, he did so with energy and zest.

David Ingalls’s family tree incorporated some of Ohio’s most prominent citizens. On his mother’s side, he descended from David Sinton (1808–1900), whose parents arrived from Ireland and settled in Pittsburgh. Described much later as a man of “irregular education,” Sinton was known as “a large, strong person with strong common sense.” He eventually relocated to southern Ohio, made a fortune in the iron business, and was at one time perhaps the richest man in the state. His elegant, Federal-style Cincinnati home survives today as the Taft Museum of Art. Sinton’s only

daughter, Anne (1850–1931), inherited $20 million from her father. She married Charles Phelps Taft (1843–1929), son of Alphonso Taft (1810–91), a man of solid Yankee stock. Originally from West Townshend, Vermont, the elder Taft graduated from Yale (Phi Beta Kappa) and Yale Law School and by 1859 had settled in Cincinnati, where he attained legal and political prominence. He ultimately served as U.S. secretary of war and attorney general and later ambassador to Austria-Hungary and Russia.

Alphonso Taft’s son Charles, the older half brother of William Howard Taft (the future judge, secretary of war, president, and Chief Justice of the United States), became a prominent lawyer in his own right, as well as a congressman and publisher of the Cincinnati Times-Star. According to Robert A. Taft’s biographer, “Wealthy brother Charley” often provided financial assistance to his justice sibling, while emerging as one of Cincinnati’s leading philanthropists. Charles and Anne Taft lived in David Sinton’s mansion until the late 1920s. Their only daughter, Jane Taft (1874–1962), was David Ingalls’s mother. She exhibited a lifelong interest in the arts and became a patroness of many museums and organizations. She also earned a local reputation as a talented painter and sculptress.10

Paternal grandfather Melville Ingalls (1842–1914), another Yankee, hailed from Maine and moved to Massachusetts, where he gained distinction as a lawyer and politician. After relocating to Cincinnati, he fashioned a remarkable career in railroads and finance. In time, he became president of several rail lines, including the Indianapolis, Cincinnati & Lafayette, later part of the Cleveland, Cincinnati, Chicago, & St. Louis, known as the Big Four Railroad. Melville Ingalls also controlled the Merchants National Bank, the city’s second-largest financial institution. His “imposing estate” stood in Cincinnati’s fashionable East Walnut Hills neighborhood. Melville’s son, Albert S. Ingalls (1874–1943), achieved great success as well. Born in Cincinnati, he

10. James Patterson’s Mr. Republican: A Biography of Robert A. Taft (Boston: Houghton Mifflin, 1972), the standard biography of the influential senator from Ohio, provides considerable information concerning the Taft family’s history, as well as that of their Ingalls relatives; see especially pp. 6–14. Jane Taft Ingalls and Robert A. Taft were first cousins, and David Ingalls was Robert Taft’s first cousin, once removed. As a young lawyer in Cincinnati in the pre–World War I period, Robert Taft “engaged in legal tasks for relatives, especially Uncle Charley and Aunt Annie.” Charles Taft’s business interests included a 157,000-acre ranch in Texas, the Taft Packing House, Taft Crystal Shortening, and “countless investments.” See Patterson, Mr. Republican, 59–60. Also see Jane Sinton Taft Ingalls’s obituary, Cleveland Plain Dealer, March 31, 1962.
attended St. Paul’s School in New Hampshire and Harvard, then went to
work for his father’s railroad, starting out dressed in overalls rather than a
business suit. He worked his way up through the system at the Big Four,
then Lake Shore Railroad, and finally New York Central Railroad, where
he became vice president and general manager of operations west of Buf-
falo, New York. As his career blossomed, Albert Ingalls moved to Cleveland,
earning some notoriety as the second man in the city to own an automobile.
He was long remembered as a hard worker and quick thinker, a master of
English who could clear a desk of correspondence in record time. He exhib-
itied a democratic spirit and genial personality and an admirable mixture of
culture, quick-wittedness, broad interests, and robust energy. From an early
age, Albert Ingalls enjoyed smoking a clay pipe. Many of his personal traits
he passed on to his children, especially David.

Albert Ingalls and Jane Taft married in Cincinnati, linking two impor-
tant Ohio clans, but soon relocated to Cleveland. The young couple lived
first in the city, then in Cleveland Heights. They had three children—David,
Anne, and Albert. David, the eldest, was born on January 28, 1899. In 1906,
the family moved to Bratenahl, one of the city’s early elite residential suburbs
on the shores of Lake Erie, known for its prominent families and manicured
estates. Residents included members of the region’s financial and industrial
elite, including the Hannas, Irelands, Chisholms, Holdens, Kings, Mc-
Murrays, and Pickandses. David Ingalls’s lifelong friend and fellow naval
aviator, Robert Livingston “Pat” Ireland, lived nearby. Ingalls spent summers
at the lakeshore or visiting his many relatives, especially his Taft cousins.

His academic training included time spent at University School in
Cleveland, an independent day school founded in 1890. In 1912, Ingalls
entered St. Paul’s School in Concord, New Hampshire, from which he
graduated in 1916, having participated in the requisite campus organiza-
tions, including the mandolin club, literary society, and scientific asso-
ciation. He played football and tennis and was twice schoolwide squash
champion. Ingalls’s most notable exploits came on the ice as a standout
hockey player. Some even compared him to the nonpareil athlete Hobey
Baker, who preceded him by a few years. At the time, the school was
“ardently Anglophile . . . High Church,” and it drew much of its stu-
dent body from the New York–Philadelphia Main Line. While at St. Paul’s,
ingalls came under the stern influence of Rector Samuel Drury, a for-
mer missionary to the Philippines who worked diligently to improve the
school’s commitment to ethical and academic standards. Drury often told his charges, “From those to whom much is given, much is expected.”

Ingalls’s schoolboy years, whether at St. Paul’s or at home in Cleveland, exposed him daily to the controversies ignited by the terrible war that broke out in Europe in 1914 and America’s appropriate response to it. As the history of St. Paul’s School documents, there was considerable anti-German feeling at that time, and both students and faculty quickly forged many connections to the fighting. Several masters attended summer military camps. Graduates enlisted with the French or British forces. Students marched in preparedness parades, volunteered for military drill, and carried out raids on various campus buildings. Like the strong winds blowing off Lake Erie, news of the war and the fierce debate it generated also buffeted Cleveland, a flourishing city with a yeasty mix of rich and poor, native and immigrant, liberal and conservative. News of the sinking of the Lusitania in early May 1915 covered every inch of the front page of the Cleveland Plain Dealer. When the German consul in Cincinnati released a statement in January 1916 defending his country’s actions in the war, the story received wide

11. Many remembered Drury as formidable, pious, and dour; others said he was “reserved, cheerless, and solemn.” The rector seemed to regard his charges as “slowly, dilatory, and slack.” See Walter Isaacson and Evan Thomas, The Wise Men: Six Friends and the World They Made (New York: Simon and Schuster, 1986), 57, 59–60. The rector arrived at St. Paul’s in 1910 at the age of thirty-one and almost immediately earned the sobriquet “Old Drury.” His young wife, Cornelia, however, quickly inspired the warm appreciation of the students, one of whom recalled her as “lovely beyond our fondest hope and expectations.” See August Heckscher, St. Paul’s: The Life of a New England School (New York: Charles Scribner’s Sons, 1980), 157, 160, 170. David Ingalls’s fun-loving, mischief-making personality survived Dr. Drury’s assaults intact. At one point, David congratulated his younger brother, Albert, a student at St. Paul’s during the war, for living down his elder sibling’s bad reputation.

12. Victor Chapman, ’07, flew with the Lafayette Escadrille. Charles Merton, ’03, drove an ambulance. Old boy Allen Loney, ’90, died when the Lusitania went down. Rector Drury advised one German master, trapped in Germany by the fighting in 1914, “It seems to me that many people at St. Paul’s do not regard the cause which you hold with much affectionate interest in the light which you regard it.” After the master returned to the school, some faculty opposed giving him his full quota of teaching hours lest he proselytize his German cause. See Heckscher, St. Paul’s, 180–81. Drury did not, however, endorse formal military training on campus. In a letter to the New York Times in August 1916, he argued that such activities, though valuable, were best carried out in the summer at military facilities equipped to provide this sort of instruction. He noted, “The spirit of patriotic obligation should be more amply urged than ever before in our schools, but the experience of military service can be adequately taught only where the routine and background are wholly military.” See New York Times, August 20, 1916.
circulation throughout the state. That same day, notices informed Clevelanders that new war motion pictures were playing in local theaters.

Residents read about vigorous efforts by pacifist, preparedness, and interventionist groups to sway public opinion. In 1915, Mayor Newton Baker, known for his antimilitarist stance, joined social reformer Jane Addams in praising the antiwar film *Lay Down Your Arms*. In the same year, Cleveland Women for Peace held a tea to honor delegates to the World Court Congress. Mrs. Baker, the mayor’s spouse, presided at the event. The miners’ union came out against military preparedness in January 1916, and members of the Cleveland Young People’s Socialist League celebrated an antiwar day the following September. In November 1916, Cleveland and surrounding Cuyahoga County voted for President Woodrow Wilson (“He kept us out of war”) by a 52-to-44 percent margin. This result received the approbation of the November 9 *Plain Dealer* editorial page, which praised Wilson for “his sane Americanism, opposition to war-at-any-price jingoism, and professional hyphenates.”

Cleveland supporters of preparedness and the Allies, however, were also vocal and well represented throughout the prewar period. Many of the city’s Yale graduates urged visiting university president Arthur Hadley to support military preparedness. In July 1915, prominent citizens organized a local chapter of the National Security League and campaigned actively for the next two years. The following summer, Bascom Little, an influential local businessman and philanthropist and member of the National Defense Committee of the U.S. Chamber of Commerce, traveled to Washington, D.C., to urge Congress to pass a proposed universal military training bill. Everyone, it seems, had an opinion about the war and what the United States should do about it.\textsuperscript{13}

In the fall of 1916, David Ingalls entered Yale University to pursue medical studies, and he again distinguished himself on the ice as captain of the freshman hockey team. Great-uncle William Howard Taft, former president and now member of the law school faculty, lived just a few blocks away. Somewhere along the way, likely at St. Paul’s or in that first year at Yale, Ingalls acquired the nickname “Crock,” derivation uncertain. (Daughter

\textsuperscript{13} Andrew R. L. Cayton observed that even after war was declared, “the sense of moral outrage [in Ohio] that had characterized the Civil War was largely absent.” The resulting war deaths were claimed by a cause “to which few people in Ohio were deeply committed.” See Cayton, *Ohio: The History of a People* (Columbus: Ohio State University Press, 2002), 234.
Jane Ingalls Davison later insisted no one in Cleveland ever called him by that name.) Ingalls soon became close friends with Henry “Harry” Pomeroy Davison Jr., son of J. P. Morgan partner Henry Pomeroy Davison and younger brother of F. Trubee Davison. While Ingalls was in New Haven, his childhood fascination with flight, his innate joy in reckless physical action, his social connections to influential fellow students, and the prewar preparedness frenzy sweeping eastern colleges almost inevitably turned his attention toward an aviation unit being formed by Trubee Davison.

By late 1916, concern over events in Europe, where the Great War staggered through its third year, and the debate regarding America’s role in the struggle reached a fever pitch, dominating the national conversation. When war had broken out in the summer of 1914, reaction had been mixed. President Wilson, who “resolutely opposed unjustified war,” insisted the United States remain neutral in the struggle and actively resisted planning for possible military intervention. Military historian Harvey DeWeerd observed, “The war was nearly two years old before Wilson allowed government officials to act as if it might sometime involve America.” Newton Baker, now secretary of war, had been a spokesman for the League to Enforce Peace. Editor George B. M. Harvey of Harper’s Weekly responded by calling Baker “a chattering ex-pacifist.” Secretary of the Navy Josephus Daniels, a man of pacifist and isolationist proclivities, proved equally critical of professional soldiers and sailors and general staffs.

14. Another descendant speculated that “Crock” might have been inspired by Davy Crockett, as David Ingalls was later well known within the family for wearing a coon-skin cap on special occasions. Alternatively, Ingalls may have adopted his nickname from the ferocious crocodile that inhabited J. M. Barrie’s popular contemporary play, Peter Pan. With no one left to tell the tale, the true origins of Ingalls’s nickname must remain a mystery. F. Trubee Davison and Henry P. “Harry” “Dude” Davison Jr., NA #72, were sons of prominent New York banker and J. P. Morgan partner Henry Pomeroy Davison. The senior Davison later served as head of the War Council of the Red Cross.


Many citizens concurred. Irish Americans opposed any aid for Britain. German Americans, including thousands in Ohio, tended to support their homeland. Antiwar sentiment ran strongly among reformers, women’s organizations, and church groups. The country’s large socialist movement called the conflict a capitalist conspiracy to generate profits and consume manpower. Traditionally isolationist regions of the United States strongly opposed involvement. Henry Ford chartered a “peace ship” to bring antiwar activists to an international conference held in Stockholm, Sweden in 1916. Reflecting the horrors unfolding on the Western Front, “I Didn’t Raise My Boy to Be a Soldier” reigned as one of the most popular songs of 1915–16.  

Such feelings were not universal, however. In fact, though most Americans supported neutrality and narrowly reelected Woodrow Wilson on the belief that “he kept us out of war,” they still preferred a Franco-British victory to a German triumph. DeWeerd claimed, “The country was pro-Ally and anti-German from the start.” Fervent supporters of Great Britain and France saw the war as a struggle between democracy and Western civilization, on the one hand, and “Kaiserism” and the brutality of the “Huns,” on the other. Submarine attacks on civilian passenger liners such as the Lusitania almost caused a diplomatic rupture between the United States and Germany. The British blockade, protested only mildly by the Wilson government, diverted most trade to England and Western Europe, and a growing tide of orders for war materials engendered further support for the Allies. So did the ever-increasing flow of loans from major American investment banks such as J. P. Morgan.

Whether favoring or opposing active participation in Europe’s seemingly endless war, many citizens demanded their government prepare for

17. According to Kennedy, “Feminists had been the first to take the field”—stalwarts such as Fanny Garrison Villard, Carrie Chapman Catt, and Jane Addams, who formed the Women’s Peace Party. Shortly after the presidential election of 1916, war opponents joined together to form the American Union Against Militarism (AUAM). Kennedy noted, “The roster of the AUAM’s charter comprised a virtual Who’s Who of advanced progressive leadership.” In fact, to “the progressive men and women who had devoted themselves . . . to all the schemes to civilize the cities and tame capitalism . . . the war [had] seemed distant, repugnant, malicious.” Kennedy offered an overview of the antipreparedness, antiwar movement in Over Here, 14–51. See also Harries and Harries, Last Days of Innocence, 49–60.

18. See DeWeerd, President Wilson Fights His War, 7.
possible involvement in the struggle, if only to defend national interests and American soil in case of a German victory. As David Kennedy noted, the outbreak of war “summoned into being . . . a sizable array of preparedness lobbies.” Some called for universal military training (conscription) and expansion of both the army and the navy. Former army chief of staff Leonard Wood, ex-president Theodore Roosevelt, and previous secretaries of war Elihu Root and Henry Stimson were only the most prominent among thousands of citizens who campaigned for such action. Leading bankers, industrialists, lawyers, academics, and politicians advocated a strongly Anglophile diplomatic and military policy, and a great mosaic of organizations took up the call.

Citizen training camps conducted at Plattsburgh, New York, and elsewhere reflected the growing clamor for preparedness. College students and faculty members, recent graduates, young businessmen, and teaching masters from a score of eastern preparatory schools spent their summers drilling, camping, and learning to fire weapons. Another outgrowth of the preparedness movement, the National Defense Act of 1916, doubled the size of the army (to 240,000) and authorized a tremendous expansion of the battle fleet, though none of its provisions would be

---


John W. Chambers II noted, “The civilian leaders of the major conscriptionist organizations were predominantly members of the new corporate-oriented business and professional elite . . . [including] industrialists, financiers, railroad magnates, and major publishers, joined by corporation lawyers, university presidents, and former diplomats . . . . They represented the top echelons of power in the new social structure of urban, industrial, corporate America” (80). Prominent advocates included Ralph Pulitzer, Joseph Choate, Lyman Abbott, Grenville Clark, Thomas Edison, Bernard Baruch, and Howard Coffin. For a detailed description of this movement, see Chambers, To Raise an Army: The Draft Comes to Modern America (New York: Free Press, 1987), 73–101. It was from this exact socioeconomic group that the Yale aviation unit and its circle of supporters emerged.
fully implemented for several years and thus would have little impact on the current crisis in Europe.  

Whatever their individual motivations, many young Americans, both men and women, took dramatic action to support the Allies. Thousands journeyed to Europe to drive ambulances, serve with the Red Cross, or perform varied volunteer duties. Others enlisted in the French Foreign Legion and eventually transferred to the aviation forces, forming what ultimately became the Lafayette Flying Corps. Still more traveled to Canada to join the British army or the Royal Flying Corps (RFC). Students at colleges such as Harvard, Princeton, and Yale formed quasi-military units and flying clubs, preparing for the day Uncle Sam might call on them.  

Even before Ingalls arrived in New Haven in September 1916, talk of war and preparedness monopolized much of the academic community’s attention, with the discussion by no means one-sided. Author George Pierson noted, “Yale was far from rising as one man to the support of Belgium and the Triple Entente.” Even as former president Taft called for strict neutrality, scholar George Adams declaimed, “Germany must be defeated in this war.” Initially, though very few students or faculty members favored the Central powers, equally small numbers advocated direct American involvement.

21. Although some later academic analysts claimed proponents of preparedness did little to educate Americans to the realities of the time (Robert Osgood, Ideals and Self-Interest in American Foreign Relations [Chicago: University of Chicago Press, 1964]), others saw a campaign motivated by an ideal of public service (John Clifford, The Citizen Soldiers [Lexington, Ky.: University Press of Kentucky, 1972]). Yet another interpretation viewed the preparedness movement as part of the contemporary Progressive search for modernization and an opportunity to reinvigorate the nation through discipline and martial values (John Finnegan, Against the Specter of the Dragon: The Campaign for American Military Preparedness, 1914–1917 [Westport, Conn.: Greenwood Press, 1975]). Finally, Michael Pearlman argued, in To Make Democracy Safe for America (Champaign: University of Illinois Press, 1984), that preparedness efforts grew from the personal, psychological, and domestic concerns of upper-class males from the northeastern region of the country and did not generate wide-based public support until after the sinking of the Lusitania. Richard Weiss termed this interpretation “the patrician as patriot.” Chambers, in To Raise and Army, 300–301, offered a quick but useful summary of the historiographical landscape. Isaacson and Thomas quoted John McCloy, later to win renown as one of the eastern establishment’s “Wise Men,” recalling his time at the Plattsburgh summer camps: “It seemed to me that all the right people went.” See Isaacson and Thomas, Wise Men, 69–70.  

22. By the end of 1916, for example, at least 89 Harvard men, 26 Yalies, and 8 undergraduates from Princeton had driven for the American Field Service, along with volunteers from about another fifty colleges. Many more drove for the Norton-Harjes ambulance operation. See Berry, Make the Kaiser Dance, 266–67. The flow of American volunteers to the Western Front was also discussed in Harries and Harries, Last Days of Innocence, 41–48.
Nonetheless, relief efforts to aid the Allies commenced almost immediately, and by 1915, many graduates called on the university to be more active in preparing for possible American involvement. Significantly, Yale president Arthur Hadley seemed “enthralled and excited by the preparedness movement,” and he praised military training for students.\(^23\)

As early as April 1915, Hadley called for national preparedness, and later that year, he declared military training should have a place on college campuses. Addressing Yale alumni in Cleveland, he argued that the best way to keep the peace was to prepare for war. After visiting Plattsburgh in August 1915 and speaking with General Wood, Hadley in the fall announced plans to establish a field artillery battery on campus, and more than 1,000 undergraduates rushed to volunteer for the 486 available places. The faculty eventually voted to establish a Reserve Officers’ Training Corps unit, a proposal backed overwhelmingly (1,112 to 288) by the student body. The National Security League sponsored mass demonstrations, and preparedness and interventionist speakers including Henry Stimson and Adm. Bradley Fiske addressed undergraduates. In the winter of 1916–17, after years of urging neutrality, William Howard Taft admitted that war could no longer be avoided.

It was in this environment that two dozen Yale students and recent alumni coalesced in 1916–17 to create an aerial defense squadron. The First Yale Unit began as the brainchild of F. Trubee Davison. After his freshman year at college, Davison spent the summer of 1915 in war-torn Paris driving an ambulance. During those months, he met many prominent participants in the effort, including several combat fliers. He first envisioned organizing a volunteer ambulance unit at Yale but later determined to establish an aviation detachment instead. This concept dovetailed with contemporary proposals by John Hayes Hammond Jr., of the Aero Club of America, and Rear Admiral Robert Peary to create a series of aerial coastal patrol groups to protect American shores in case of war.\(^24\)

---

\(^{23}\) George Pierson’s *Yale College: An Educational History, 1871–1921* (New Haven, Conn.: Yale University Press, 1952), 447–65, provides a good overview of the Yale community and the coming of World War I. Brooks Kelley, in *Yale— A History* (New Haven, Conn.: Yale University Press, 1974), 348–50, observed, “Yale men were not of one mind about the great war.”

\(^{24}\) The story of the First Yale Unit is related in exhaustive detail in Paine, *First Yale Unit*. See also Marc Wortman, *The Millionaires’ Unit: The Aristocratic Flyboys Who Fought the Great War and Invented American Air Power* (New York: Public Affairs, 2006), for a modern retelling of the exploits of this group.
By the spring of 1916, Davison had enlisted the support of several young comrades, including Harry Davison, Robert Lovett, Artemus “Di” Gates, Erl Gould, and John Vorys. Riding the wave of preparedness enthusiasm, he also gained the backing of influential private benefactors. Davison approached the Navy Department concerning his scheme and received modest encouragement, though no official support. Nonetheless, in July 1916, the fledgling group commenced training at aviation enthusiast Rodman Wanamaker’s Trans-Oceanic seaplane facility at Port Washington, New York, under the tutelage of pioneer flier David McCulloch. Of the dozen college boys who trained that summer, three soloed. Some of them also participated in naval reserve exercises.

Encouraged by the group’s successes, Davison and his mates increased their efforts to gain additional recruits after classes resumed at Yale—among them David Ingalls, just arrived in New Haven and still only seventeen—while intensifying discussions with the navy. In late winter 1917, when entry into the European war seemed inevitable, members of the group, now grown to more than two dozen volunteers, made plans to leave school and enlist. They did so with the support of President Hadley and Dean of Students Frederick Jones. On March 24, 1917, the Yale fliers traveled to New London, Connecticut, to complete the process. A few days later, they boarded a train to Palm Beach, Florida, to initiate instruction.

Commencement of unrestricted submarine warfare the previous winter had pushed the reluctant administration past the breaking point, and even as Ingalls and the rest of the Yalies begin training in Florida, President Wilson addressed Congress, asking for a declaration of war against Germany. The navy and its infant aviation arm would soon be called upon to do their part to defeat the U-boat scourge. The need was huge, the dangers

great, and the threat mortal. In the first half of 1917, shipping losses to enemy submarines surged to intolerable levels, reaching nearly nine hundred thousand tons in April. Continued losses of that magnitude would quickly bring Britain to its knees. But in the opening days of hostilities, American naval aviation could not challenge the U-boat. Total flying resources consisted of a few dozen obsolete and obsolescent training aircraft; a lone underpowered, overweight dirigible; two balloons; a single understaffed and underfunded training facility at Pensacola, Florida; two score fliers (but none who had seen combat); and a few hundred enlisted ratings. The navy possessed neither aviation doctrine nor plans. No blueprints for wartime expansion existed, either for personnel or equipment.

Although the navy made modest technical progress in the years after the first fragile airplane took off from an anchored warship in 1910, it still lagged woefully behind the European combatants. In 1916, its three lonely assistant naval attachés posted to Berlin, Paris, and London supplied limited, circumscribed information about conditions in the war zone. A single lieutenant in the offices of the Aid for Material on the staff of the Chief of Naval Operations handled aviation affairs in Washington. A simple description of naval aviation activities in Europe reflects the degree to which the navy fell behind its future allies and enemies. By the spring of 1917, Britain’s Royal Naval Air Service (RNAS) operated a growing number of coastal bases stretching from Scotland to the south coast of England and Dunkirk in France, and in April 1917, it

26. Several good overviews of U.S. naval aviation activities in the prewar period exist, including Archibald D. Turnbull and Clifford L. Lord, History of United States Naval Aviation (New Haven, Conn.: Yale University Press, 1949); Clifford Lord’s typescript, multivolume administrative history of naval aviation in the period 1898–1939 prepared shortly after World War II (available in the aviation history section, NHHC); and Clark Reynolds, Admiral John H. Towers, which details Towers’s work as assistant naval attaché in London in the period 1914–16 and his duties as the sole aviation officer on the chief of naval operations staff in 1916–17. In June 1916, Britain’s Royal Naval Air Service counted nearly thirteen thousand officers and men and more than one thousand aircraft, with additional massive expansion programs under way. France and Germany also built up powerful naval aviation forces. For a crisp summary of the role of naval aviation in the 1914–18 period, as well as comparative statistics for all the naval aviation services, see Layman, Naval Aviation in the First World War. Development of naval aviation under wartime conditions in Europe can also be traced in Lee Kennett, The First Air War, 1914–1918 (New York: Free Press, 1991); Abbatiello, Anti-Submarine Warfare in World War I; and Terry Treadwell, The First Naval Air War (Stroud, U.K.: Tempus Publishing, 2002).
initiated the “spider web” antisubmarine patrols over the North Sea. The Royal Navy’s air arm also employed several land-based squadrons on the Western Front, carrying out patrol, reconnaissance, and bombing missions; its aircraft inventory included modern Sopwith Camels and Triplanes, Handley Page heavy bombers, and huge Curtiss-derived Felixstowe flying boats. The RNAS also possessed a large fleet of SS-type airships, along with a well-developed network of training facilities. Kite balloons operated regularly with the fleet. Naval aviators carried out combat missions in the Aegean Sea, at the Dardanelles, and in Egypt, East Africa, and elsewhere. The RNAS had mounted bombing raids against German airship facilities at Friedrichshafen, Cologne, Dusseldorf, and Cuxhaven and against munitions and industrial targets, as well as airborne torpedo attacks at Gallipoli. Britain led the way in marrying aircraft to the fleet, deploying more than a dozen balloon ships, seaplane carriers, and prototype-hybrid aircraft carriers. One of these warships, *Engadine*, played a small role at the battle of Jutland. More sophisticated vessels were on the way. Other innovations included aircraft with folding wings, designed for easy, onboard stowage; internal air bags to keep downed machines afloat; and use of scout planes aboard battleships and cruisers by means of turret-mounted launching platforms.

Though the RNAS developed the biggest forces, other nations followed suit. Germany built the largest fleet of rigid airships (zeppelins), which conducted extensive scouting/reconnaissance missions for the High Seas Fleet and launched heavy bombing raids against London and other British sites. Germany also constructed numerous seaplane bases on home soil, along the Baltic coast, and in Belgium, and from these locations, it operated the world’s most sophisticated floatplane fighters. In April 1917, German naval air forces initiated a series of torpedo attacks against Allied shipping in the Dover Straits. France constructed a string of antisubmarine patrol stations to guard the English Channel, Bay of Biscay, and Mediterranean Sea, and its naval forces employed kite balloons during convoying operations. Italy developed the speedy, highly maneuverable Macchi flying boat fighters, based on an Austro-Hungarian prototype, and conducted a back-and-forth struggle across the narrow reaches of the Adriatic Sea. In 1916, Austro-Hungarian seaplanes sank a British submarine moored in Venice and shortly thereafter fatally damaged a French submarine at sea. As early as 1915, Russian naval forces in
the Black Sea labored, with some success, to sever Turkish sea-lanes, utilizing up to three seaplane carriers.

It was in the shadow of these developments that the United States entered the fray in April 1917. Under forced draft, naval aviation eventually amassed forty thousand officers and enlisted men, augmented by thousands of aircraft and dozens of bases, schools, and supply facilities in Europe and the United States. By autumn 1918, navy fliers were ready to make substantial contributions to the war effort, but the armistice intervened. In the short run, however, before such a force could be assembled and deployed, the country necessarily relied on the efforts of individuals such as David Ingalls and hastily organized groups such as the First Yale Unit to carry out its evolving aeronautical campaign.
Thank you for your interest in this Ohio University Press title.

This book is available for purchase online at our website or through other ebooks vendors.