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They also flew: Women aviators in Tennessee, 1922–1950

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Middle Tennessee State University, 1990

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THEY ALSO FLEW:
WOMEN AVIATORS IN TENNESSEE, 1922-1950

Janene G. Leonhirth

A thesis submitted to the
Graduate Faculty of Middle Tennessee State University
in partial fulfillment of the requirements
for the degree of Master of Arts

December 1990
THEY ALSO FLEW:

WOMEN AVIATORS IN TENNESSEE, 1922-1950

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ABSTRACT

They Also Flew:
Women Aviators In Tennessee, 1922-1950

Janene G. Leonhirth

The decades of the 1920s through the 1940s were a time of tremendous growth for the aviation industry. Women, such as Amelia Earhart, helped to promote that growth; a fact that on the surface challenged the traditional view of women's place in society. But the careers of less famous women who flew in Tennessee, which had the reputation of being a state progressive in aviation, show women's opportunities in the field were limited to specific gender-defined areas.

This conclusion was reached after consulting the records and publications of the Tennessee Bureau of Aeronautics, newspaper and magazine articles, and the personal scrapbooks of women who flew in Tennessee between 1922 and 1950. Interviews with the women used as examples, or with their families, also contributed to the findings.
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INTRODUCTION

The United States underwent great changes in the decades of the 1920s, 1930s, and 1940s. From the Roaring Twenties it plunged into the depths of the Great Depression in the 1930s, only to have World War II jolt it into a position of a major world power. Yet not all of American society experienced such drastic upheaval. The place society held for women remained virtually the same from 1920 until 1950, despite the disruptions of depression and war. Yet it is difficult to generalize about American women. Divided by class and race, they seldom have been a homogeneous group. But one overriding theme emerges from the literature on women in the thirty years between 1920 and 1950. Although they advanced in some areas, such as paid employment, traditional gender expectations underscored any changes.

Even though more women were in the work force in 1930 than had been in 1920, they still did so-called women's work, whether they chose white collar professional or blue collar jobs. They taught, worked in offices, performed domestic service, or labored in factories, particularly in the garment industry. Historian Dorothy Brown found that "86 percent of the women employed toiled in only ten occupations." This trend carried through the 1930s. Society relegated women to
traditional female jobs, a trend reinforced by the curriculum offered at institutes of higher education.¹

Just as the job market remained segregated according to gender, so did domestic roles. Men provided for the family, while women took care of the home and children. As the Depression wore on, it became increasingly unpopular for married women to work. Society perceived them as taking jobs away from men who had families to support. So strong was the domestic gender division that it even pervaded popular culture.² In 1936, Mother Moran of the popular soap opera "Today's Children" gave her "Recipe for a Happily Married Life" as,

A cake to bake, and a floor to sweep, .
And a tired little child to sing to sleep,
What does a woman want but this--³
A man, a home and a child to kiss.³

By the end of the 1920s and in the 1930s women accepted this idea, perhaps more than they had in previous decades. If they went to college or worked, it often was as an interlude between high school and marriage and family, rather


²Ware, 13.

³Ilene Wicker, Lonely Heart, lyrics by Ilene Wicker (n.p.: Pillsbury Flour Mills Company, 1936), back cover, Archive of American Popular Music/UCLA Collection, Center for Popular Music, Middle Tennessee State University, Murfreesboro, Tennessee.
than as a steppingstone to a lifelong career. Although some tried to combine marriage and a career, if pressed to make a choice between the two, they were likely to choose marriage.⁴

World War II made it acceptable for women to cross the gender barrier, albeit temporarily. Total war required total mobilization of the country. Women had to step in as defense workers for the military if the war effort were to succeed. Yet throughout the war, society did not forget the ideas of femininity and "woman's place." Typically, defense industry recruiters emphasized the similarities between household appliances and factory machinery. If women had mastered the vacuum cleaner, sewing machine, or electric mixer, they could learn to operate factory machinery.⁵

More difficult to overcome was the public's image of the military as an exclusively male preserve. Women feared that military service would destroy their femininity. Their concern was strong enough for the military to address it. Nancy Shea, author of The WAAC, a book that explained the Women's Auxiliary Army Corp to potential recruits, echoed the military's concern that "it is still their Army and they intend to run it along masculine lines," but "a woman in

⁴Ware, 66.
uniform is still a woman, and Uncle Sam has no desire to
defeminize her." In fact, it did not. When women first
joined the military, they primarily served in traditional
female roles, such as cooks or clerical workers. Yet, in
doing so, as the standard rhetoric suggested, they performed
a vital job in the war effort: releasing men for more
hazardous jobs (which the military would not allow women to
perform). Adding women's numbers to the men's numbers meant
a larger combat force and ultimately, a quicker end to the
war. And in their own way, even if it were just "typ[ing]
and fil[ing] in the Army way," women were defending their
families, too.6

Before the war ended, women's participation in non-
traditional areas began to decline. Industry started to make
a place for soon-to-be returning veterans by laying off many
women. And the media, especially film and women's magazines,
told women that while their help had been necessary, they now
should return to their homes and families. Often, they were
left with little choice to do otherwise. Historian Susan
Hartmann attributes this to the "conservative forces of war,
the antifeminist backlash, and a general desire for the
'normalcy' denied by depression and war." Ultimately, she
maintains, it was because of deep "sex-role socialization."

6Rupp, 97; Nancy Shea, The WAACs (New York; Harper and
Brothers, 1943), 106, 109; Hartmann, 35; and Ruby Jane
Douglas, The WAAC is a Soldier Too, lyrics by Ruby Jane
Douglas (New York: Kaycee Music Company, 1943), 2, Archive of
American Popular Music/UCLA Collection.
So firmly entrenched in American society was the notion of male and female spheres that not even total war could change this concept permanently.  

Against the backdrop of the 1920s through 1940s, women found a place in the growing aviation industry where their opportunities closely paralleled those of women in society at large. Flying was still a novelty as late as 1920, despite its limited role in World War I. Throughout the decade it was characterized by the daredevilry of barnstormers, many of whom had been World War I pilots. At decade's end, the feats of Charles Lindbergh and Amelia Earhart focused the attention of the world on flight. But even then it was an area of entertainment, not a practical transportation means for the general public. Yet there was a segment of the population, those in the fledgling aviation industry, that believed the airplane would solve all of the world's problems by bringing its people closer together, and that it would become the most widely used means of transportation.

"Skybirds . . . make war thunders cease, They're the real birds of peace, Skybirds Are my birds of love!" rhapsodized one adherent of what Joseph Corn has called ________________________________


the "winged gospel." The watchword of that gospel was
"air-mindedness." To be air-minded Americans had to be
enthusiastic about the airplane, believe that it could
contribute to a better way of life--perhaps world peace--
and support aviation development. By the early thirties
aviation was becoming more practical. A few airlines
serviced the country, and air mail was a reality. But much
of the American public still was wary of flight on a personal
level. To convert them and to pave the way for the day when
Americans would fly airplanes as readily as they then drove
automobiles, someone had to demonstrate the safety and ease
of flight to them.9

Enter women such as Amelia Earhart, who is merely
the most famous of several women who helped to "sell"
aviation to the American public and who were most visible
between 1928, the year Earhart first crossed the Atlantic
by air, and 1937, the year she disappeared attempting to fly
around the world. She and others, such as Blanche Noyes,
Louise Thaden, Jacqueline Cochran, Helen Richey, Nancy
Harkness, and Phoebe Omlie, participated in aerial races,
set aviation records, and tried to show by their example
that flying was easy.10

9August Joseph Koehl, Sky-Birds, lyrics by August
Joseph Koehl (New York: Jack Mills Inc., 1928), 5, Center for
Popular Music Collection, Center for Popular Music, Middle
Tennessee State University, Murfreesboro, Tennessee; and
Corn, vii, 12, 75.

10Corn, 72.
They drew upon the "stereotypical image of the lady pilot" with little mechanical aptitude or capability to show that if they could fly, anyone could succeed in this endeavor. The feminine image was also important to the "selling" of aviation. Jacqueline Cochran became famous for her refusal to exit any plane which she piloted without freshening her makeup. That she owned a cosmetics company may have contributed to this habit, but it worked so well in assuring the public of her femininity that in 1942 a journalist noted: "though she flies like a man she hasn't become trouser-minded." Earhart also took care that she not appear too masculine and flew in regular street clothes when it was practical.\(^{11}\)

Although some, most notably Earhart, were feminists, they "subordinated the cause of equality for women to the cause of aviation." This may have been because they felt that by proving their abilities they ultimately would win acceptance by the aviation industry of women pilots on a larger scale. Earhart, writing in 1932, noted that most women who worked in the aviation industry were held to traditional women's jobs. Many worked in offices, while most sewed the fabric used for wing covering or to make parachutes. (Men, however, packed the parachutes, a

\(^{11}\)Corn, 76, 84; and Janet Flanner, "Women with Wings--Jacqueline Cochran," Harper's Bazaar, 15 September 1941, Janet Hargrave, Scrapbook, Personal Files of Janet Hargrave, Malibu, California.
more exacting task since, if not packed properly, the parachute would not open.)

"There are a few one-of-a-kind factory jobs," Earhart added, "existing perhaps because of an individual's unusual ability and because such a worker doesn't interfere much with men's employment." But she prophesied a greater place for women in aviation, and hoped that her example would draw more women into the field. At the time that she wrote, only 472 women had pilot's licenses, compared to 16,754 men. Those women who did were "not different" from any other group of women. "[T]hey are simply thoroughly normal girls and women who happen to have taken up flying rather than golf, swimming or steeplechasing," she explained. Women who didn't fly, she added, were deterred by a "tradition" that kept women from trying new things and from applying themselves fully when they did venture into new areas. Society, Hartmann noted, expected women to be "protected and passive." The same tradition that deterred women "also [made] men unwilling to recognize women's abilities." But in using women to "sell" aviation, men "recognized" two abilities that society attributed to women--those of nurturing and teaching. By the end of the

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13 Earhart, 141, 145-146, 162: and Hartmann, 13.
1930s, the practicality of aviation was proven, and women found themselves losing their place as pilots (saleswomen). But those women of Earhart's era had set an example for younger women: they did have the ability to learn to fly provided they had the means to do so, since flying lessons were expensive.14

And young women did want to fly. A 1939 Gallup Poll showed that if they could learn to fly at no cost, sixty-two percent of the women respondents between the ages of eighteen and twenty-nine would fly. "You simply can't keep a young bird from trying its wings--not in 1940," an American Magazine writer proclaimed in the prelude to the testimonial, "I Let My Daughter Fly." With federal and state government subsidized flying lessons, this statement was more nearly true than it otherwise would have been. And although the Civil Aeronautics Administration Civilian Pilot Training Program (CAA CPTP) did not allow women to participate on the level with men, several thousand women did earn their pilots licenses through it. They would have a limited future as pilots, however, had it not been for World War II.15

14 Corn, 88.

Just as the war made it possible for women to enter heretofore male occupation areas and the military, so did it provide unprecedented opportunities for several thousand women pilots. During the war, women made up ten percent of the sixty-six thousand members of the Civilian Air Patrol, a group of civilian pilots that patrolled coastal areas and airports for the military. But more visible and controversial were the 1,074 Women Airforce Service Pilots (WASP) who flew for the Army Air Forces. The WASP was the combination of two women's pilot groups, the Women's Auxiliary Ferrying Service (WAFS) and the Women's Flying Training Detachment (WFTD), both formed in September 1942.16

WAFS, started by Nancy Harkness Love, a former air racer and pilot for the government, were highly qualified women pilots who ferried planes from manufacturers to air bases. Former air racer, record holder, and businesswoman, Jacqueline Cochran, formed the WFTD to provide additional training for women who already held pilot's licenses before they assumed duty with the Ferry Command and the WAFS. In July 1943, the two groups merged under the leadership of Cochran and became the WASP. Like the newly formed women's branches of the military, one of the primary purposes of the

WASP was to allow women to perform routine flying jobs in order to release men for combat or more hazardous flying assignments.  

These WASPs were acutely aware of the possibility of resentment against them. How much glamour could male pilots claim if they and these women were flying the same planes, including the high-powered P-51 Mustang and the B-29 Superfortress. In a poem titled "Avenger Field," after the airfield where WASP trained and where male cadets had trained before the women's arrival, one WASP cadet noted that the airfield was not built for the women and asked it "if you feel that you have lost / Your heritage of glory, when I came? / Or do you feel that I've a small part too, / When frenzied war encircles all the earth?" She summed up hers and other WASP's feelings in the last line: "To fly; to do my part / Is all I ask."  

WASPs flew for two years and three months. Throughout their last year, Cochran and Army Air Forces General H.H. "Hap" Arnold battled in vain congressional and public charges that the WASP was an expensive glamour organization whose members deprived men of jobs. This attitude contributed to its demise in December 1944, but by that time Allies had the upperhand in the war and the military had cut

\[\text{17} \text{Schaffter, 51, 52.}\]

\[\text{18} \text{Effie Pratt, "Avenger Field," Jennie Gower, Scrapbook, Personal Files of Edwin Gower, Nashville.}\]
programs to avoid a surplus of personnel. World War II proved to be the last time that women would fly for the military for the next three decades, and its end signalled the return of women pilots to traditional female roles in aviation: they could teach flying or write about it.¹⁹

Tennessee and Tennessee women were active participants in the air-mindedness of the 1930s and 1940s. Between 1935 and 1950, the Tennessee Bureau of Aeronautics (TBA) vigilantly worked to introduce aviation to Tennesseans of all ages. TBA programs allowed participation in aviation from basic awareness of flight to pilot training. Although the state’s programs, with the exception of one, did not specifically promote women in aviation, women did find an opportunity to fly in the state. Some of them went on to take part in the WAFS and WASP.

One who did join the WAFS became one of the most famous women pilots in the state. Cornelia Fort, the daughter of a wealthy Nashvillian, learned to fly in 1940. She put her skill to practical use teaching in the CPTP, first in Colorado, then in Hawaii. When the Japanese attacked Pearl Harbor, Cornelia was in the air with a student pilot and narrowly missed being shot down.

by a Japanese plane. She landed just before the enemy strafed her airport.²⁰

The attack convinced her to use her abilities for the war effort. In 1942 Nancy Harkness Love provided her the opportunity, and Cornelia was among the first ten women to join the WAPS. Unfortunately, her career in the organization was short-lived. On 21 March 1943, during a routine plane delivery, Cornelia Fort crashed. She was the first United States woman pilot to die on active military duty.²¹

Like most pilots, women included, she could not explain why she flew, only that she had to fly.

None of us can put into words why we fly. . . . I can't say exactly why I fly but I know why as I've never known anything in my life. . . . I knew it when I saw my plane silhouetted against the clouds framed by a circular rainbow. . . . I know it in dignity and self-sufficiency and in the pride of skill. I know it in the satisfaction of usefulness.²²

But Cornelia Fort was not the only Tennessee woman to seek self-sufficiency, usefulness, dignity, and skill in the air. Following are the stories of several others, as well as that of Tennessee air-mindedness. That all but two of the women were contemporaries of Cornelia attests to the


²²Fort, "Twilight's," Jennie Gower, Scrapbook.
expansion of opportunities for women in aviation in the late thirties and early forties.

This study begins with Jane Hilbert's experiences. A true aviation pioneer, she was the first woman to operate an airport in the United States. The aviation careers of Gene Slack and Lorraine Buttrey were direct results of the State's air-mindedness. Both learned to fly through TBA-sponsored schools. Gene contributed to that air-mindedness by writing aviation columns before joining the WASP, and Lorraine briefly operated a flying school in Nashville.

Next to Cornelia Fort, Phoebe Omlie gained the most national attention of Tennessee's women pilots. Although she began her career in 1920 as a barnstormer, she contributed most to the field, both nationally and on the state level, in the 1930s and in World War II as an employee of the CAA. She headed the only Tennessee program devoted strictly to women pilots, the Tennessee Women's Research Instructor School. Jennie Gower was a participant in the school, and after graduation, taught male air cadets and WASPs before joining the organization herself. But not all of the women who took advantage of aviation opportunities in the state were native Tennesseans. After the war and service in the WASP, Janet Hargrave, a native of Southern California, found work flying in Tennessee, first
as co-owner operator of a flying service with Jennie Gower, then as an employee of another flying service.

Through the experiences of these pilots one sees the accomplishments of women in aviation and the limits placed on them by society and the aviation industry because of their gender—limits that existed even in a state that prided itself on the air-mindedness of all of its citizens.
"There have been some insinuations," wrote Tennessee Bureau of Aeronautics (TBA) Director Herbert Fox, "that Tennessee has not been progressive in aviation matters." The year was 1949, and Fox, addressing TBA Chairman C.S. Ragland, was quick to point out the accomplishments that Tennessee had made in the field. By 1949 that list was quite impressive, including ranking at or among the top of the most progressive aviation states in the country on a nationwide Nashville Chamber of Commerce poll. Just one decade earlier, this was not true. Fox documented the change: "Every County Seat in the State is air marked. We have 72 airports as compared to 16 a decade ago; 68 air schools compared to 4; 20,000 airmen compared to 700; 9 airlines compared to 2. Aviation investments approximating $400,000,000." This progress was the result of the state's concerted effort to improve the status of aviation, beginning in 1935 with the creation of the TBA. The state legislature formed the bureau and allowed the governor to appoint a five-member commission and one full-time state director of aeronautics. With its main emphasis the promotion of civil aviation, the TBA intended for every Tennessean to be prepared for the second half of the
twentieth century with its increased emphasis on air transportation. Members of the TBA envisioned a world in which the private airplane would supplement the family car. Truly air-minded Americans foresaw an "airplane in every garage." The TBA wholeheartedly accepted this and embraced the "winged gospel" of aeronautics as a force for improving the world.¹

One of its first steps toward creating an air-minded state was to analyze aviation in Tennessee. Published in 1936, An Analysis of Aviation in Tennessee and Recommendations for Needed Improvements showed a state dismally prepared for the air age. Although commercial airlines entered the state in 1928, and by 1935 linked it to the West Coast, New York, Washington, and the Midwest, Tennessee had no modern airports. Only small landing fields dotted the countryside. The report also showed a decline in the number of pilots in Tennessee. From eighty-eight in 1929, with a steady increase to 205 in 1932, the number of licensed pilots dropped to 148 in 1933. By 1935 the state's aviation industry still had not recovered from the loss.

The largest decline was in the number of private pilots, indicative of the effects of the Depression on private flying. But even if more Tennesseans had wanted to learn to fly or had been financially able, there was no standard theoretical instruction available. Transport pilots usually gave flying lessons as a sideline to their regular businesses. Even then, however, the opportunity to learn to fly existed only in Memphis, Nashville, Clarksville, Clinton, Knoxville, Chattanooga, and Bristol. The state had a long way to go to become air-minded, and the analysis proposed that it needed more landing fields, better navigational aids, and more aviation education to speed it along its way.²

The national emphasis on increased air-mindedness helped the state in its efforts. In the first of Tennessee's objectives, more and better landing fields, the New Deal's Works Progress Administration (WPA) aided the state. In 1935 the WPA began a program to build new airports and to improve existing ones. By 1936, the Division of Airways and Airports had initiated 320 airport projects. Five of those were in Tennessee. Colonel Harry S. Berry, WPA state administrator, supervised the $2.5 million project, which included the expansion of the Memphis and Chattanooga airfields, and completely new construction

²Tennessee Aeronautics Commission, An Analysis of Aviation, 7, 8, 10, 20.
of airports in Nashville, the Tri-Cities, and Knoxville. Tennessee civil aviation received an economic boost with the passage of the Tennessee Aviation Act. Under it, a seven-cent aviation gasoline tax provided for maintenance and improvement of state airfields. Three and one-half cents of each seven cents went toward this end, while the other half financed aviation education for the state's youth. In this way, civil aviation paid for itself. The more people flew in Tennessee, the better conditions were for them to fly, and the more they could contribute to the state's air-mindedness. The act was so successful that other states copied it.  

But improved airfields were useless without pilots. In 1938, the TBA found a way to train hundreds of Tennesseans as pilots, while making thousands of them more air-minded. The brainchild of Walter Williams, head of the state bureau and commanding officer of the Tennessee National Guard Air Squadron, the Tennessee Civilian Pilot Training Program (TCPTP) was the first systematic and

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serious effort at pilot education in the United States. Open to anyone sixteen or older, the course offered three months of ground school instruction in aerodynamics, theory of flight, airplane structures and rigging, engines and accessories, meteorology, navigation, and civil air regulations. That first year, some 2,790 students enrolled in the five schools, located in Nashville, Memphis, Chattanooga, Knoxville, and the Tri-Cities. They were students, housewives, engineers, and factory workers, salesmen, mechanics, clerks, bookkeepers, newspapermen, insurance agents, and commercial artists. They came from all walks of life, for one purpose—to learn to fly. The state offered to the top twelve men and three women in each of the five schools fifty hours of free flight time, enough to earn a private license.4

Heading the program for the state bureau was Jim Kukla, a seasoned air school manager and employee of an aircraft manufacturer. Instructors from local flying schools taught the classes, and competition for the coveted fifteen slots was tough. The TCPTP was so successful that by 1939 the state had given free ground school courses to more than four thousand people and had turned out 150 private pilots, many of whom would not otherwise have

been able to afford the estimated seven hundred dollars that such instruction cost. Some students who did not rank among the fifteen highest in the classes pursued private licenses at their own expense. But not only could the benefits from the program be measured in the increased air-mindedness of Tennessee's citizens, they also provided more tangible results. Airport business increased in each of the five cities that held the classes. "Private instructors have had to buy new airplanes and hire assistants to take care of the new business. Airports that formerly drowsed along except when an air liner came in, now hum with activity," American Magazine reported to the nation. Tennessee was at the forefront of aviation progress. Its success inspired the federal government to appropriate $4 million for its own Civilian Pilot Training Program (CPTP), initially designed to train ten thousand student pilots in 460 colleges and universities. In 1940, Tennessee relinquished civilian pilot training to the Civil Aeronautics Administration (CAA). The federal government, like the state, allowed women a place in its CPTP; although at a ratio of one female to nine male students, it hardly could be considered anything more than token representation.5

5Cheney, 47; Gordon Gaskill, "Making Pilots out of Bookkeepers," American Magazine, September 1939, 46, 47, 154; Cheney, 46; Roseberry, 420; and Sally Van Wagenen Keil, Those Wonderful Women in Their Flying Machines: The Unknown Heroines of World War II (New York: Rawson, Wade Publishers, 1979), 64.
As the prospect of war loomed closer, the TBA turned its attention elsewhere. Between 1939 and 1941, foremost on the minds of Bureau members was the inculcation of Tennessee's youth with a love of aviation. Members of the TBA thoroughly agreed with Assistant Secretary of Commerce, Robert Hinckley, when he said,

It is not enough that our people be airminded. They must be air-conditioned. Something deeper is needed than mere consciousness of the airplane. There must be universal familiarity with it, and basic understanding of why and how it operates. We will have to plan our education efforts in aviation so that the American people may become as much at home in air as the Hawaiians are in the water. The only way we can do it right is to 'catch 'em young and tell 'em everything.'

With this in mind, the TBA devised a plan by which schoolchildren would become willing and able participants in the coming air age and in the coming emergency, if needed. Instruction began with young schoolchildren, and the Bureau distributed 130,000 model airplane kits to state schools. The Bureau also hoped one day to provide summer camps at which older children could "join Gliding and Soaring groups, [and] get practical instruction in managing [air]craft in the air." College would provide actual flight training. In the meantime, the Bureau supplemented the model kits with air maps, bulletins, posters, pamphlets, and books, such as

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6 Robert Hinckley, quoted by Herbert Fox, Nashville, to Governor Prentice Cooper, W. Percy McDonald, C. W. Phillips, Charles Ragland, and John Lovell, 16 October 1941, TAC Papers.
Facts on Aviation for Future Fliers of Tennessee, a textbook for children that introduced them to aviation's past, present, and future, and to possible careers within the field. Schools accepted the textbook so readily that the TBA printed a second and third edition. In all, more than 160,000 copies went to the state's schoolchildren throughout the early 1940s.  

Tennessee's school teachers also fell under the Bureau's plans for air-conditioning. In 1944, the TBA awarded seventy thousand dollars in scholarships to teachers to introduce them to aviation. Seven colleges, Austin Peay, Memphis State, the University of Tennessee Junior College at Martin, East Tennessee State, Middle Tennessee State, Tennessee Polytechnic Institute, and the University of Tennessee, provided public school teachers with twelve weeks of ground school instruction and ten hours of dual-control flight instruction. It was not the intention of the Bureau to make pilots out of these teachers, but merely to provide them "with an aviation background to better prepare them for teaching subjects related to aviation to the air-minded youth" of Tennessee.  

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8Minutes of a Tennessee Bureau of Aeronautics board meeting, 10 August 1944, TBA History Collection; and "Learn to Teach Flying," TBA History Collection.
The degree of flying activity in Tennessee before the war and the increased number of airports drew wartime aviation programs to the state. Tennessee was one of the first states to form a Civilian Air Patrol wing during World War II. By 1942, it led the Southeast in the number of students trained in the CAA CPTP; six hundred graduated each eight weeks. And the next year, reports indicated that the state led the nation in the number of schools and colleges participating in the Civilian Pilot Training/War Training Service (CPT/WTS) program. Tennessee's schools numbered twelve, while of other Southeastern states, Texas had eight, Georgia had four, and Alabama and Kentucky had one each.9

In 1941, Vultee Aircraft opened a plant in Nashville, while the federal government located a Ferry Command at the Nashville Municipal Airport and established military bases across the state. By 1942, Governor Prentice Cooper, an advocate of Tennessee air-mindedness, could boast to radio audiences:

Tennessee's aviation program has reached the point where it will not be many weeks before a cadet can be inducted into the air force near Nashville, take his preliminary training near Jackson or Union City, his basic training near Dyersburg and his advance bomber training near Smyrna.

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9Fox to Ragland, TAC Papers; Minutes of a Tennessee Bureau of Aeronautics meeting, 29 September 1942, TBA History Collection; and Minutes of a Tennessee Bureau of Aeronautics meeting, 3 February 1943, TBA History Collection.
After that he will be able to fly a war plane built in Tennessee and serviced by mechanics trained in Tennessee.\footnote{Governor Prentice Cooper, "Aviation in Tennessee," delivered over WSM radio, Nashville, 11 May 1942, Governor Prentice Cooper Papers, Tennessee State Library and Archives, Nashville.}

The TBA took it one step further in 1942 when it opened the Tennessee Women's Research Flight Instructor School in order to prove to the federal government that women could play an active part in the aerial war effort as primary flight instructors for both the Army Air Forces and the Navy (see Chapter Five).

Behind all of the state's aviation activities was the driving notion that private air transportation would dominate the future. "It is certain that you will spend much time in the air from now on," William A.M. Burden, Assistant Secretary of Commerce, wrote in his introduction to Facts on Aviation. And, while

air transport . . . is very interesting . . . private flying will come closer to your lives. Ultimately it may become larger in all respects than commercial flying.

To accommodate the numerous private fliers, the federal government sponsored the building of several prototypes of a "roadable" airplane in the 1930s. Most "roadable" airplanes, as did the one described in Facts on Aviation, had detachable wings and could be flown or driven as needed. To the TBA, preparedness not only referred to the war, it
also referred to the future air age: Tennesseans had to be able to function in it.\textsuperscript{11}

The place the TBA board envisioned for women in the air age, however, was limited, despite Burden's optimism that there was a difference between the air age in which the book's readers were living and the automotive age of their parents.

In your parents' younger days, women stayed away from the controls of the automobiles, leaving them mostly to the men. Today, however, your mother and your big sister drive the family car as much as the men in your family. With the family airplane, the girl starts even with the boy as pilot, and you girl students should know as much about the airplane as the boys.\textsuperscript{12}

The textbook later told its readers that "a boy or girl in school can train" for such jobs as air line pilot, commercial pilot, aeronautical engineer, air line maintenance engineer, air line service engineer, and air line sales work "beginning even in the first grades of High School." Yet, as it described the qualifications needed for each career, it addressed only the "boys" among its readership. Flying, evidently, would be part of a woman's duties for the family, not a profession. The only program that the TBA specifically designed for women, the flight instructors' school, also maintained normal gender roles for women: society accepted them as teachers. But Tennessee

\begin{itemize}
\item \textsuperscript{11} Tennessee Bureau of Aeronautics, \textit{Facts on Aviation}, 6, 12.
\item \textsuperscript{12} Ibid.
\end{itemize}
women did more than teach aviation. Several, from 1922 until 1950, also operated airports and flying services, and flew for their country during World War II.\textsuperscript{13}

\textsuperscript{13}Ibid., 25.
"Flying has not been made easy for women," Jean Adams and Margaret Kimball, the authors of *Heroines of the Sky* wrote in 1942. Barring their success in aviation was the high cost of airplanes, lessons, and contest fees. Many of those who had been able "to get the essential tools for success in aviation had married pilots or promoters or men of wealth," they noted. But cost was not the only obstacle to the women aviator. "Remember," they continued, "that only a handful of women have found it possible to make a living by flying. This is because men have not welcomed their competition." One woman who had been able to make a practical career in aviation, however, was Jane Dulaney of Bristol, Tennessee, whose entrance into the field pre-dated Tennessee air-mindedness by five years. Although she was not one of the women who found aeronautical success by marrying a pilot or a wealthy man, it was a man who introduced her to aviation, and who made it possible for her to learn to fly.\(^1\)

A barnstormer in East Tennessee in 1918 took eight-year-old Jane on her first flight. At age twenty-one, she

\(^1\)Jane Hilbert, telephone conversation with author, 15 April 1990.
found her own place in aviation. Jane had just teed off at
the local golf course when a friend drove by and asked her
if she wanted to learn to fly. He had opened a flying
service and, like many men at that time who used women to
"sell" aviation, thought that if he could teach a woman to
fly, that business would boom. "It didn't work that way,"
Jane remarked nearly sixty years later. Her friend's flying
service failed, but Jane succeeded. She earned her private
license in 1932, becoming the first woman in Virginia to do
so, and began what would be a lifetime career, all because
of free flying lessons.\(^2\)

But piloting an airplane was not to be Jane's first
job in aviation. In 1933, she joined Eastern Airlines as a
hostess on its Washington to Miami flight. The trip in a
24-passenger, Condor biplane, with fabric covered wings,
took ten hours each way and included a layover in Miami.
Eastern was the only airline at the time that did not
require its hostesses to be licensed nurses. The airline
did require that they "treat our passengers as we would
guests in our own home," Jane remembered. In this way they
contributed to the pleasantness of the trip and helped to
make flying "thinkable" for the general public. But when
the government in 1934 cancelled Eastern's air mail

\(^2\)Clipping, Kingsport Times-News, n.d., Appalachian
Region, Southern-Biography-H, Appalachian Vertical Files,
Archives of Appalachia, East Tennessee State University,
Johnson City, Tennessee; Hilbert, telephone conversation;
and Appalachian Vertical Files.
contract, which had been a virtual subsidy, the airline had to curtail services and cut back its staff. Jane and three other hostesses found themselves grounded and unemployed. Returning to East Tennessee, Jane landed a job with a competing airline, American, as the local airport manager, becoming the first woman in the United States to hold such a post. For three years her duties included running the office, reporting on area weather, checking passengers and load weights on all planes, making reservations, selling tickets, and loading air mail (which required that she wear a .38 caliber Colt revolver). In 1937, however, a man took over Jane's job, with the assistance of ten to fifteen employees.  

Jane went to work for Louis Hilbert at Appalachian Flying Service. Members of the Tennessee Bureau of Aeronautics (TBA) thought well of Louis. He participated in the Tennessee Civilian Pilot Training Program (TCPTP) and then became involved with the Civil Aviation Administration Civilian Pilot Training Program (CAA CPTP). Jane took part in both, also. For the TBA ground schools in 1938 and 1939 she taught meteorology, aircraft structures, and aero­dynamics. In 1942, she earned her commercial license and flight instructors' rating and gave flight lessons for the CAA CPTP. That August, she married Louis. Instead of

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initially broadening her aviation activities, as it did for other women, her marriage to a pilot prevented her from participating in Nancy Harkness Love's Women's Auxiliary Ferrying Service (WAFS), which she founded in September 1942.  

Jane was one of the first women pilots to receive a telegram that September requesting an interview for a place in the WAFS. Although she met their requirements—commercial license, five hundred hours logged flight time with fifty hours in the preceding twelve months, two hundred horsepower rating, high school education, age between twenty-one and thirty-five—she could not accept the invitation. When she received the telegram, she excitedly telephoned Louis, already in the Ferry Command in Nashville, only to be brought back to reality. If she were to join the WAFS, who would run the business? Jane found her place during the war not flying across the United States for the Army Air Force (AAF), but in giving primary instruction to Army air cadets from East Tennessee State College in Johnson City and King College in Bristol as part of the CAA CPTP, now called the War Training Service.  

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4 Telegram, [?] Baker to Mrs. Louis Hilbert, 11 September 1942, Appalachian Vertical Files; and Hilbert, telephone conversation.  

"The colleges would send them out in buses, 20 or 30 at a time," she later told a newspaper reporter. "They'd stay 30 to 45 minutes or an hour, and another group would arrive. It went on all day long from dawn to dusk."

Appalachian Flying Service, and others like it across the state and country, provided AAF cadets with ten hours of flight training before it transferred them to military staging areas. By providing these men with primary flight instruction, Jane was already doing what the TBA spent fifteen thousand dollars from September 1942 to February 1943 to prove to the federal government that women could do. But still, she was one of few women teaching air cadets. Jean Adams and Margaret Kimball noted in 1942 that only three women were doing the same thing at CAA-approved centers. Appalachian Flying Service and the wartime training program flourished under Jane's management. Louis returned to East Tennessee in 1946 to find it sound and ready to take them into the postwar air age.6

Jane remained active in aviation until her retirement nearly two decades after the war ended. She and Louis kept the flying service, for which she maintained the office, piloted for an occasional charter flight and gave lessons. It would be easy to attribute Jane's postwar career to the fact that she married a flying service owner. But

6Hilbert, telephone conversation.
considering her prewar employment record, that assumption would be hasty. Throughout the thirties when both men and women were skeptical of women's aeronautical abilities, Jane succeeded: "I worked in a man's world all my life and never had any problem. They seemed to think I was one of them."  

Flying with Jane and Louis in the local aviation club, the Hedgehoppers, was Gene Slack. In the early days of aviation, flying provided women a chance to prove themselves and to test their independence; it "symbolized the freedom and power which was lacking in their daily lives." In 1938 it still afforded some the opportunity to alter the course of their lives completely. Gene was one of them. "By all rights and laws of averages [Gene should have] grown up to marry the boy down the creek and help him till his forty acres." Instead she learned to fly and left her East Tennessee mountain home.  

It was in childhood that Gene had her first aviation experience. But she did not get to ride in the plane, only to watch it as it flew over the mountain on which she lived. Its sound, "the hum of fat black and yellow bumblebees ten thousand strong," first captured her attention; when she


8 Slack, "WASP Story, 1945(?); and Gene Slack Scharlau, telephone conversation with author, 19 March 1990.
finally saw it, it piqued her imagination. Running home, she found out that the plane was on a barnstorming tour and was en route to the fair grounds in Mountain City, twelve miles away. But Gene's family had no money for fairs or for transportation to them. So throughout her childhood and into adulthood, she dreamed of flying. She already had completed high school and two years of college at East Tennessee State College and was working for Bemberg Silk Company as a chemical analyst when she heard the news. The TBA was sponsoring a program to teach people to fly. Gene was just the kind of person whom the state hoped to attract to its program. She already was air-minded and was on her way to becoming "air-conditioned." Both she and her brother joined the ground school classes, which Jane Dulaney and others taught, despite her brother's protests that "the only girls there will be rough people." And when the instructors tabulated the final grades, both Gene and her brother were among the fifteen in the Tri-Cities area to earn free flying lessons. To take them, Gene and another woman got up at 4 a.m. to fly before going to work. On 30 November 1938 her loss of sleep paid off, and she earned her private license. 9

Gene became a full participant in the state's air-mindedness. She joined the local air club, which sponsored

flying meets against similar clubs in nearby Virginia, and she joined the Ninety-Nines, the women's aviation group that Amelia Earhart and Phoebe Omlie founded in the late 1920s. But flying itself, at seven and eight dollars an hour, was expensive, now that the state no longer paid for her flight time. Like a true convert, she decided to take the message of aviation to the people and in doing so to help finance her own activities in the air. The medium she chose to convey her message was the local newspaper, the Johnson City Press-Chronicle, which, she thought, "needed an aviation column." Gene wrote three versions of one column, marched to the editor's office, and placed them before him. The next day the editor had a new aviation writer, and Gene had started her aviation writing career with the column, "Heard Above the Prop." She earned ten cents for each column inch that she wrote. "Whatever I made from writing about flying went right back into flying. If I was long wined enough I could fly an hour a month off the column, and sometimes two." Eventually, "Heard Above the Prop" appeared in the Elizabethton Star and in the Kingsport Times as well, and it qualified her for membership in the Aviation Writers Association (AWA) in which she was one of only four women members. The AWA broadened Gene's horizons even more, with conferences in different parts of the country. At one conference, in Washington, D.C., she even piloted a blimp.\footnote{10Scharlau, telephone conversation; and Slack, "WASP Story, 1945(?)."}
About 1942, Gene moved to Nashville and began working for the *Tennessean* as an aviation reporter and columnist. "Tennessee Airways" appeared in the Sunday paper, and through it Gene helped to promote air-mindedness in the state. Her articles, published in such aviation magazines as *Flying*, also brought nationwide attention to Tennessee aviation activities, such as the Tennessee Women's Research Instructors School. She continued to write until early 1943 when she joined Jacqueline Cochran's Women's Flying Training Detachment (WFTD).\(^{11}\)

Happy, proud, excited, and scared, she arrived in Sweetwater, Texas, a member of the first class to train there rather than in Houston. Upon graduation with class 43-W-4, she was stationed with the 6th Ferrying Group in Long Beach, California. During her time there, she flew co-pilot in B-17s, B-24s, C-60s, and C-47s, delivering them to points all across the United States. "People ask me, 'Ever been in Salt Lake City?' 'No, but I've seen it from the air.' They ask 'Say, you know such-and-such a restaurant in Seattle?' I answer, 'No, but I can tell you how Puget Sound reaches in and wraps the town in cool green fingers . . . or about Mt. Rainier to the southeast . . . or the little boats riding all the water ways.'"\(^{12}\)

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\(^{11}\) Slack, "WASP Story, 1945(?)".

\(^{12}\) Ibid.
In July 1943, the WAFS and WFTD merged to form the WASP. Gene made the transition, but was reminded of her brother's initial prejudice against women pilots as men would call out, "Hey, how's your stinger today, Babe?" Remarks such as this and comments on the women's appearance, such as "frowzy headed," "ugly WAFS," or "stringy haired bags" were common. Such attitudes, that they were either unfeminine or immoral, later plagued the women who joined wartime programs such as the Women's Army Corps and Women Accepted for Voluntary Emergency Service. She not only saw the personal resentment from male pilots and other military personnel, but Gene also experienced firsthand one of the primary problems that the WASP faced. When she fell down some stairs outside her barracks and twisted her knee, she was refused treatment at the base hospital because she was civilian. As civilians, WASPs also received no health or death insurance benefits.¹³

Gene's wartime aviation career ended in October 1944, the month that General H.H. "Hap" Arnold and WASP Director Jacqueline Cochran announced that the group would disband in December. She left the WASP early in order to write a book about her experiences in aviation, centering on the WASP. When Gene returned to Tennessee after the war and a brief stint ferrying planes privately, she settled in Nashville, Tennessee.

¹³Slack, "WASP Story, 1945(?)": and Dorothy Swain, Ye Olde Strynge-Hayrede Bagges, Janet Hargrave, Scrapbook, Personal Files of Janet Hargrave, Malibu, California.
married, and resumed her aviation writing career. Throughout the late forties, she edited the newsletter for the TBA, and wrote scripts for its radio program, "Mike Flight," which aired on WSM.14

By the late forties, however, the status of civil aviation was in decline. March 1949 "marked a new low for the state in aviation public relations," reported the aviation writer for the Nashville Banner. Not only did the TBA newsletter go out of print, but its radio show also went off the air. Unemployed and divorced with a small child, Gene returned to the Air Force in time for the Korean conflict. But Lieutenant Gene Slack Teague, like all women in the Air Force, did not fly. No pilot shortage required women pilots in this war. Instead of piloting B-24s, as Gene did during World War II, she wrote radio scripts.15

Yet, Gene had come a long way from the poverty and mountains of East Tennessee; she had traded her "forty acres of stumpy soil for forty acres of sky" and an entirely different life from the one she would have led had she not learned to fly.16

14Slack, "WASP Story, 1945(?)": Scarlau, telephone conversation; Nashville Banner, 31 March 1949.
15Nashville Banner, 31 March 1949; and Gene Slack Scharlau to [the] Editors, Eleanor Friede Books.
16Slack, "WASP Story, 1945(?)".
Despite the success attained by women such as Jane Hilbert in aviation, flying was a precarious occupation for all pilots, but especially for women. When one attempt failed, often there were no other opportunities. Lorraine Buttrey, co-owner and operator of a Nashville flying service, discovered this at the age of twenty-two, just three and one half years after she had earned her pilot's license.

Hers was the typical entrance into aviation. Charles Lindbergh's trans-Atlantic solo flight in 1927 inspired her to take to the air, and she saved her money to take her first airplane ride with an area barnstormer. When she was old enough to learn to fly herself, however, she could not because of the expense involved. The Depression had taken its toll on her family's finances, and Lorraine had even given up a scholarship to college and taken a job to help ease the situation. Flying was out of the question. Then, in 1938, she read about the Tennessee Civilian Pilot Training Program (TCPTP).¹

¹ Lorraine Buttrey Johnston, interview with author, Nashville, 19 October 1989; and Rural Radio, n.d., Tennessee Bureau of Aeronautics History Collection, Department of Transportation, Office of Aeronautics, Nashville (hereafter cited as TBA History Collection).
She joined the class in Nashville, along with nearly five hundred other students, and completed the course with an average grade of 84.5. Lorraine ranked among the top three women students and top fifteen overall. She earned the free flying lessons, although she always suspected that the Tennessee Bureau of Aeronautics (TBA) allowed women to take them "to prove to the men it was safe to fly." Flight instruction came from "Chili" Miller, who owned Miller Flying Service at Nashville's municipal airport. He was a tough taskmaster, and in fact may have tried to wash her out of the course by scheduling her lessons that summer for early afternoon when air currents are roughest. But she persevered. Miller was not so tough that he would jeopardize her chances for earning her license, however. He scheduled her test for late afternoon; the more tranquil air currents made her flight seem "boring," and she passed her test almost effortlessly. At age eighteen, she was a licensed pilot, even though her father would not let her learn to drive a car.²

Just flying was not enough for Lorraine, though. It consumed her entire life. She quit her job working in a magazine circulation department and began to hang around the airport. She became such a fixture, that Miller hired her

²Brainard Cheney, "Flying for Nothing," Popular Aviation, September 1938, 47; Unidentified clipping, TBA History Collection; and Lorraine Buttrey Johnston, interview with author, Nashville, 7 April 1990.
as his bookkeeper. Like most new pilots, she joined aviation associations. But she felt out of place with other members. At one convention, she found that she was the only woman in attendance and felt uncomfortable with the older men's language and drinking. But she also felt ill at ease when she attended the Ninety-Nines meeting where the women exhibited similar behavior. In 1939, the TBA purchased five new Piper Cubs for its pilot training program. Lorraine was one of five pilots whom the bureau called upon to fly the planes from the factory in Lock Haven, Pennsylvania, to Nashville. The trip took thirteen hours and netted her a photo in the Louisville Times. But Lorraine did not care for the publicity she received flying through Kentucky or as a part of the American Magazine article on the TCPT; she did not care for the pilots' associations, either. She "just wanted to fly. . . . That's as far as it went. I was just going to fly." But Lorraine "hadn't thought about making [her] living" by flying. "I wasn't that advanced in my thinking." Her attitude changed when "Chili" Miller put his flying service on the market.3

In 1940, Miller joined the Ferry Command of the Army Air Forces and decided to sell his flying service. Lorraine wanted to purchase it. Repeated trips to the bank to discuss a loan, however, cost her the service. Instead of lending her the money, a group of local bankers and

3Johnston, interview, 19 October 1989.
investors purchased it for themselves. They soon became disillusioned with its returns and placed it back on the market. In late 1940, Lorraine and three men, all of whom had met while students in the TBA program, bought it. Nominally, Charles Johnston became president of Miller Flying Service; Jack Caldwell, vice president; and, Lorraine, secretary-treasurer. In fact, Lorraine handled the day-to-day business of running the flying service, taking care of clients and giving lessons. Her partners had other jobs that demanded their time, but they periodically went to the airport to see if she needed anything and to offer some "fatherly advice."\(^4\)

During their first year of ownership, business boomed, partly because of local Civil Aviation Administration Civilian Pilot Training Program (CAA CPTP) activity. Miller Flying Service provided flight instruction for area colleges and universities participating in the CAA's program. From September 1940, to September 1941, the service's profits totaled twenty thousand dollars, and the owners projected a five thousand dollar increase over that for the next year. Then the dream became a nightmare. Miller's lease with the city for its hangar at Berry Field expired 30 September 1941. But renewal did not secure use of the hangar for

\(^4\) Johnston, interview, 19 October 1989; City of Nashville v. Miller Flying Service, Inc., 1941, Case 58009, Davidson County, Tennessee Chancery Court Part I, Nashville; and Johnston, interview, 19 October 1989.
another year; it merely embroiled the service in a battle with the city over rights to the hangar. Three weeks after Miller declared to the city its intent to renew its lease, which Mayor Tom Cummings accepted and acknowledged by letter, the Tennessean reported that "unless the City of Nashville can make immediately available the necessary property at Berry Field, the war department will locate its $900,000 bomber ferrying command base elsewhere." Part of that property included the Miller Flying Service hangar, which lay between the space occupied by the 105th Observation Squadron, already leased by the federal government, and one hundred acres it was to lease for construction of new barracks, an officers' club, and taxiways.  

Cummings assured the newspaper reporter that he had "cooperated with the government to the 'fullest extent,' offering the war department everything it wanted ... except the hangar used by the Miller Flying Service, which has been leased from the city through September 1942." Toward the end of October, however, the city changed its mind about Miller's lease. On 23 October, Mayor Cummings, Charles Johnston, and Louie Gasser, owner of Nashville Flying Service, which also had a hangar at Berry Field, met to work out an arrangement whereby Miller could share hangar

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5 City of Nashville v. Miller Flying Service, Inc.; and (Nashville) Tennessean, 21, 23 October 1941.
space with its competitor. But they did not reach an agreement since airport officials deemed it improbable that there would be enough room for both services in one hangar. Five days later, the City of Nashville requested an injunction from Thomas A. Shriver, Chancellor, Part One Chancery Court at Nashville, to oust Miller Flying Service from its hangar. In its complaint, the City suddenly argued that the original lease was illegal, because it was never reduced to writing. It also argued that any present lease was invalid since Miller had not given thirty days' written notice, and because a clause in every leaseholder's agreement gave the federal government first option for any municipal airport property in the event of a national emergency. Such a situation existed, they argued, although the United States was not yet at war. The War Department needed a Ferry Command base to "accommodate planes enroute from the West Coast and other plants to Newfoundland and other taking-off points for the flight to Britain." 6

Coverage of the court battle in the local morning newspaper gave the impression to the public that Miller Flying Service was hampering the war effort. One woman declared, as Lorraine boarded a city bus, that she was such a detriment to the effort that she should go to Germany where she could be more help to Hitler. Charles, speaking

6 (Nashville) Tennessean, 21, 24 October; 6, 22 November 1941; City of Nashville v. Miller Flying Service, Inc.; and (Nashville) Tennessean, 23 October 1941.
for the entire staff of the flying service, repeatedly
stressed to the press that they were not trying to "block"
the establishment of a Ferry Command base in Nashville. He
pointed out that the service itself was doing essential war
work by teaching college students to fly under the CAA CPTP,
and he expressed a willingness to vacate the hangar. "But I
do think that it is unfair for the city to take what
property I have without proper compensation," he added.7

In answer to the city's arguments, Miller Flying
Service countered with its own. It acknowledged that it had
not given written notice thirty days in advance of lease
expiration because the city had assured it, after it had
given oral notice throughout the final month, that no
problem existed with renewal. The flying service also
argued in its affidavit that the city had never told it of
the clause favoring the federal government: "Any insistence
or contention that the option to renew the lease was
conditional or that it could be exercised only by a written
notice given thirty days prior to the expiration of the
lease . . . [Miller] charges, is an afterthought."8

But Chancellor Shriver thought otherwise and ordered
the flying service to vacate its hangar by the middle of
November. Miller countersued, and a Tennessee State Court

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7Johnston, interview, 19 October 1989; and (Nashville)
Tennessean, 14, 22 November 1941.

8City of Nashville v. Miller Flying Service, Inc.
of Appeals judge returned the decision to Chancery Court for a full hearing. Throughout November and December the case bounced from one court to another with favorable results coming from the federal and state courts, and unfavorable decisions coming from the city court. On 22 December 1941, Chancellor Shriver reached his final decision: "from all of [the testimony] it is manifest that the City of Nashville was, and is, entitled to immediate possession of the premises in question." Miller Flying Service received a writ of injunction ousting it from the hangar on 24 December. Three days later, Charles announced that the service would comply and that it would operate out of Gillespie Airfield in North Nashville until it completed training of twenty CAA CPTP students in order to fulfill its contract with the War Department.9

Miller Flying Service's fate was not sealed because its operator was female. Charles Johnston's name headed the company's administrative staff, not Lorraine Buttrey's. The service met its demise because the federal government stood "ready to expend a large sum of money" in Nashville, but would not do so until it had the Miller hangar. Nevertheless, the outcome was the same. Lorraine was grounded. Miller stored its equipment in a fireproof storage facility at the corner of Murfreesboro Road and

9(Nashville) Tennessean, 1, 7, 14 November; 23, 24, 27 December 1941.
Thompson Lane. Charles Johnston was one of the first to join the Ferry Command in Nashville. But despite valiant efforts on the part of base commander, Colonel Stevens, he could not get Lorraine into the Ferry Command, too. "He worked and he worked," she remembered. "We kept meeting and he said, 'They think I'm crazy... There is no way ever that a woman will be in the air force.'" But women were flying for Britain's Air Transport Auxiliary (ATA), that country's equivalent to the United States' Ferry Command.

In early 1942 Lorraine applied to go with a group of twenty-five American women, led by Jacqueline Cochran, to Britain to fly for the ATA. But she was not accepted.*°

In April 1942, with all flying opportunities exhausted, she decided that she "might as well go ahead and marry Charlie" [Johnston], because she "thought everything was over and done with." In September 1942, Lorraine received a call from Colonel Stevens: "You're in," he announced. "You're in the Ferry Command." Both the Women's Auxiliary Ferrying Service and the Women's Flying Training Detachment opened that month. But Lorraine had to decline: she was three months pregnant. She spent the war traveling around the Eastern part of the country from one

*°City of Nashville v. Miller Flying Service, Inc.; Johnston, Interview, 19 October 1989; and Unidentified newspaper clipping, TBA History Collection.
assignment to another with her husband, and caring for the first one, then two small boys. 11

Lorraine's last hope for a career in aviation went up in flames when the warehouse in which she had stored the Miller Flying Service equipment burned during the war years. Without the equipment and after the financial strain caused by the court battle with the City of Nashville, she and her husband were unable to get back into the business. Neither could she afford to fly as a hobby. With two small children, her money had to go for other things. "I had a choice between flying and my family, and I chose the latter." 12

11 Johnston, interview, 19 October 1989.
12 Ibid.
Phoebe Fairgrave Omlie did as much for aviation as Amelia Earhart or Jacqueline Cochran, even though her name is not as well-known as those of her colleagues. She was a true pioneer in the field, beginning her career in the early 1920s when barnstorming was one of only a few ways to make a living by flying. But she progressed beyond this daring, adventuresome—even foolhardy—aspect of aviation to become one of the field's most ardent supporters and innovators, contributing much to it through her work with the National Advisory Committee for Aeronautics (NACA) and the Civil Aeronautics Administration (CAA). Throughout her career, Phoebe stressed the practicality of aviation and the need for safety. And, although she believed that women's place in aviation would never be as large as that of men, she provided several women the chance to prove themselves in the field.

Flying was not a life-long dream of young Phoebe Fairgrave. She never considered it, in fact, until one day right before high school graduation. That was the day that President Woodrow Wilson spoke in her hometown of St. Paul, Minnesota. The airplanes that flew overhead as part of his entourage captivated her. The lure of the air was so great...
that she succumbed to it after three weeks of clerical work, quit her job, and bought an airplane with an inheritance from her grandfather. It was 1920, and at first the men at the local airfield were not eager to let the petite young woman learn to fly. But she earned their confidence, took lessons from Vernon Omlie, a World War I pilot, and embarked on a flying career that would span three decades.¹

In 1920 and 1921, flying was still new. Few opportunities were open to men in the field, and even fewer were available for women. So Phoebe did the only thing she thought that she could do: she learned to walk wings, hang by her teeth below the plane, perform acrobatics from one plane to another flying alongside, and parachute. On 10 July 1921, Phoebe set one of her first records when she parachuted from an altitude of 15,200 feet, breaking the old women's record of eleven thousand feet. "It was terrible," she reported to the press. "I never want to try it again." But she did jump again, and invented the double parachute drop, in which the skydiver wore two parachutes, cut the first free in mid-air, and free-fell briefly before opening the second. By December of that year, Phoebe had decided that "doing high jumps and wing-walking are lots of fun when once you get the hang of it." She parlayed her new skills

into a job with the Glenn Messer Flying Circus and into stunt work on the "Perils of Pauline" films. Then she went on the road with her own act, the Phoebe Fairgrave Flying Circus. Joining her as pilot was Vernon Omlie.²

In this early age of aviation, thousands would come out to see Phoebe's show. But it was difficult to ensure that all of them paid. For this reason, barnstorming usually meant a hand-to-mouth existence. It was a shortage of money that forced the Flying Circus to linger in Memphis, Tennessee, in 1922. A temporary holdover turned into a permanent change of residence. That year Phoebe and Vernon married and decided to settle in the Bluff City.³

In many ways, it is remarkable that Phoebe survived the twenties. Three serious accidents threatened to make her just another statistic—another daredevil who lost her life tempting fate. The first was a parachuting accident. As she dropped from the plane, the wind carried her over electrical wires, on which she landed. In a half dozen places the hot wires seared her flesh to the bone. As

²Charles Lane Callen, "There's No Stopping a Woman with Courage Like this!" American Magazine, August 1929, 142; Dawson, 44; (Des Moines, Iowa) Evening Tribune, 11 July 1921, Phoebe Omlie Information File, Memphis History Room, Memphis/Shelby County Public Library and Information Center, Memphis, Tennessee; Judy Lomax, Women of the Air (New York: Dodd, Mead Company, 1987), 35; (Memphis) Press Scimitar, 19 December 1921, Phoebe Omlie Information File; and Dawson, 44.

³(Fairfield, Iowa) Daily Ledger-Journal, 5 August, 1921, Phoebe Omlie Information File; and Lomax, 35.
she lay in the hospital, her main concern was not of her own recovery, but that her mother not know the seriousness of her injuries. Knowing that the newspapers would cover her return to work, and that her mother would see the stories, Phoebe took to the sky, despite having severely burned hands and one arm strapped to her side with bandages. Once in the air, she extricated her injured arm from the bandages and inched her way across the wing of the plane. Movie crews captured it all on film, but almost contributed to her death in doing so. As the camera plane zoomed in for a close-up, Phoebe caught a blast from its propeller. "Taken without warning, I lost my grip entirely. I was falling backward, but the Lord and luck didn't desert me. I doubled a leg and it caught about one of the struts. The camera got it all."

Although she did not return to work full-time for several more weeks, her escapade had accomplished its goal. The newspaper coverage convinced her mother that she was not seriously injured.  

Broken bones resulted from the other two accidents, in which Phoebe's plane crashed. She swore off flight instruction forever because a frightened student caused the first accident. Faulty equipment, which she did not detect in a hastily performed safety check, caused the second. But neither deterred Phoebe from pursuing her chosen career,

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4Callen, 144.
even when she had to return to work with temporary leg braces.\(^5\)

When the Air Commerce Act of 1926 created the Aeronautics Branch of the Department of Commerce, and it became mandatory for a pilot to have a license in order to fly, Phoebe joined Jimmy Doolittle, Charles Lindbergh, Amelia Earhart, and Ruth Nichols in being the first pilots licensed in the United States. The following year, she became one of only two women, the other being Nichols, to hold a transport license, the highest grade, which allowed her to carry passengers for pay. By the mid-1920s, Phoebe and Vernon had changed their emphasis in aviation. "We are no longer selling thrills; we are selling safety," Phoebe told an American Magazine reporter. The Omlies were, in fact, selling practical aviation, but met resistance from Memphians who were not yet willing to accept the potential of the air age and of aviation as anything other than a daring adventure. The Mississippi River flood of 1927, however, worked in the Omlies' favor. Their Mid-South Airways, the first flying service established in the Southeast, provided invaluable assistance to flood relief workers and to flood victims. During the emergency, Mid-South Airways flew food, first aid supplies, medical personnel, Red Cross officials, and mail into the Mississippi Delta. It provided planes for aerial

\(^5\) Ibid.
reconnaissance to check levee damage and for newsreel photographers. And the Omlies did it all without accident or incident.\(^6\)

The Depression forced Phoebe to go outside of the South to supplement the family income. Finding a ready job opportunity in the marketing of aviation, she signed on as assistant to the president of Mono Aircraft Company, and flew its Monocoupe in air races around the country. In 1929, she won her division in the first Powder Puff Derby, an international flying race for women. Memphians followed her exploits closely as she traversed the country in her black and orange moncoupe named Miss Memphis. They cheered her on as she amassed victories and shattered records. And, they evidently were not the only ones to take notice. In 1932, Phoebe's life changed when Eleanor Roosevelt cabled her asking for her help in the presidential campaign of that year. Phoebe accepted, and with Sarah Lee Fain, a former member of the Virginia State Legislature, flew through Missouri, Kansas, Wyoming, Colorado, Nebraska, South Dakota, North Dakota, Minnesota, Iowa, Indiana, and Kentucky, campaigning for Roosevelt. On each side of the plane was painted, "The Victory Pilots - Win With Roosevelt."\(^7\)

\(^6\)Roseberry, 76; (Memphis) Commercial Appeal, 1 November 1927, Phoebe Omlie Information File; Callen, 144; (Memphis) Press Scimitar, 6 August 1936, Phoebe Omlie Information File; and Callen, 29, 144.

\(^7\)Jean Adams and Margaret Kimball, Heroines of the Sky, with the collaboration of Jeanette Eaton (Freeport, N.Y.:
The next year, Roosevelt did not forget Phoebe's efforts, and she and other women joined the New Deal administration. As Special Assistant for Air Intelligence for the NACA, the predecessor to the National Aeronautics and Space Administration (NASA), Phoebe was the first woman in the federal government to hold an official post in connection with aviation. From her desk in Washington, she made more contributions to the field than she could have in the cockpit of an airplane. Eleanor Roosevelt even named her one of the twelve women whose accomplishments made it "safe to say the world is progressing." One of her first achievements was the air marking program, initiated in 1935. These were the days when pilots, especially private pilots, navigated by inching their way down a map with their thumb, by following a highway, river, or railroad, and even by "buzzing" the local depot to verify their location. Phoebe thought that "if the aviation industry [were] to grow as large as the automobile industry," that the private pilot had to be "encouraged." Air marking was her answer. The program called for twelve-foot, black and orange letters to be "painted on roofs of barns, factories, warehouses and water tanks. Visible from four thousand feet, they [identified] the locale, [gave] the north bearing and
[indicated] by circle, arrow and numeral the distance and direction to the nearest airport." Air marking called for markers across the country at fifteen-mile intervals.  

As part of the Works Progress Administration (WPA), air marking provided thousands of jobs for unemployed men, but it also allowed several women pilots a place in aviation administration. Somebody had to travel to WPA centers and establish the program in each state. Phoebe hired Louise Thaden, Helen McCloskey, and Nancy Harkness, all of whom held transport licenses. Their task was to prove to each WPA state board that the plan would work and to remain long enough to set costs and wage scales for the state. When Harkness quit the program to marry Robert Love, Helen Richey took her place. Blanche Noyes joined the program soon afterwards.  

Phoebe thought that women had a definite place in aviation and expressed this opinion many times.

Women can make [aviation] or break it. . . . As long as women are afraid of the air they will exert every effort to keep the men out of it. Every time a man who has become enthusiastic about aviation suddenly loses his interest in it, you can make up your mind

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9Roseberry, 231; and (Memphis) Commercial Appeal, 17 November 1935, Phoebe Omlie Information File.
that his mother or his wife or his sweetheart is responsible... We have to win over the women. 10

This was typical of the rhetoric of the time. Women could help to "sell" aviation to the public by accepting its practicality, but did winning over the women include turning them into pilots? According to Phoebe it did. But she realized that women pilots had limited opportunities to fly for a living.

Any woman who can drive a car can learn to drive a plane. It isn't hard and it requires no more skill than it does to operate a car in city traffic. But, while I have a transport pilot's license, I don't fool myself. The pilots on our air lines are and will continue to be men. We don't hire women chauffeurs and locomotive engineers, and no more shall we be persuaded to ride behind women air pilots. But that's no reason why women should not learn to fly. 11

The example of one of her own air marking employees proves this. In late 1934, Central Airlines hired Helen Richey as the first woman commercial airline pilot in the United States. The action met with strike threats from the pilots' union, which also rejected her application for membership. And the Bureau of Air Commerce "warned" the airline to keep her grounded during bad weather. Within a short time, Richey's duties had devolved into public relations activities. She granted interviews to the press, "posed for publicity photographs, spoke to luncheon clubs, [and] handed out souvenir postcards to visiting school

10 Callen, 29.
11 Ibid.
children." She resigned from the airline in 1935 because the airline would not permit her to do the job for which it hired her. The example of Helen Richey shows that women could be pilots, but that the aviation industry was not ready to accept them as commercial pilots. Their contributions would have to be made elsewhere.  

Phoebe hired her female staff to prove that women pilots could do the job as well as men. By August 1936, Phoebe had made her point—air marking was a success and Time and Newsweek brought it to national attention. Unfortunately, tragedy overshadowed the joy surrounding Phoebe's achievement. That same month, Vernon and seven others onboard City of Memphis, a three-month-old Lockheed Electra commercial airliner, died when it crashed near St. Louis, a result of pilot error. Devastated, Phoebe resigned her post with the NACA the next month and returned to Memphis. But she did not give up her career. She promptly took to the sky again for Roosevelt, logging ten thousand miles and stopping in 150 towns in twenty states during a six-week campaign trip.  

13 "One of Those Things," Time, 17 August 1936, 24, 26; (Memphis) Press Scimitar, 6, 31 August 1936, Phoebe Omlie Information File; (Memphis) Commercial Appeal, 1 September 1936, Phoebe Omlie Information File; and (Memphis) Press Scimitar, 2 November 1936, Phoebe Omlie Information File.
Phoebe did not return to Washington for several years. But the years she spent in Tennessee during the late 1930s were productive ones—for her and the state. In 1937, Phoebe and W. Percy McDonald authored the state's new aviation act, which called for the seven-cent aviation gasoline tax. When the Tennessee Civilian Pilot Training Program opened in 1938, Phoebe taught one of the ground school courses at the Memphis school; she also introduced aviation into the vocational program of Memphis public schools.

In 1941, Phoebe returned to Washington to be coordinator of the aviation activities of the WPA, National Defense Commission, and Department of Education. During the first months of 1941, she traveled twelve thousand miles and established sixty-six schools under the CAA Civilian Pilot Training Program for primary aviation instruction. One of these, in Tuskegee, Alabama, was the only school that trained black pilots. Later that year, she visited more than two hundred airports throughout the country to choose those that would be best suited for training of ground crews. Such experience served Phoebe well, for Tennessee soon requested her services as head of its Women's Research Flight Instructor School, a program intended to help alleviate the pilot shortage by training women as military flight instructors, and thereby release men for more hazardous duty. Loaned by the CAA to do so, from September
1942 until February 1943, Phoebe developed and supervised every detail of the school. Her accomplishments in aviation, before and during the war, led one of her contemporaries to write:

To others of her sex Phoebe Fairgrave Omlie flashes a beacon light along the airways of the future, for she is a woman who has risked death a thousand times, who has known how to love, how to fly, how to teach, and how to serve her country.

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When the Civil Aeronautics Administration (CAA) took over the training of civilian pilots, its program had two purposes: to boost aviation, and to provide a pilot pool for an emergency. From 1940 to July 1941, women found a place in the CAA Civilian Pilot Training Program (CPTP), albeit a limited one: for every ten students, one could be female. But by 1941, aviation was losing its civilian status, and women no longer had a place in the program. Training them to fly would have been useless, reasoned the government, since there was no opportunity for women to fly in the military.¹ But Tennesseans thought otherwise.

Cornelia Fort was the first to suggest that the Tennessee Bureau of Aeronautics (TBA) "take definite steps to encourage and sponsor the training of women flyers." She approached the bureau on 3 March 1941, with her idea, but the bureau, after several months' deliberation, declined to take action for lack of funds. World War II and its pilot shortages, however, changed the TBA's mind. To protest the removal of women from the CAA CPTP and to prove that women

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did have a place in the war in the air, W. Percy McDonald, chairman of the TBA, formulated the plan to train women as basic flight instructors for the military. It was here that the shortage was most critical, especially since many male instructors were drafted into the infantry. The problem was so severe that Charles E. Planck, CAA press representative, predicted that CPTP operators and civilian schools training pilots for the military might have to halt operations if women did not take over elementary flight instruction. If the TBA had had its way, its proposed program would have led to the training of hundreds or thousands of women flight instructors for the war effort. When the program began, approximately fifty of the nation's three thousand women pilots had instructors ratings.²

Reaction to McDonald's proposed school was favorable. A letter from Assistant Secretary of Commerce for Air Robert H. Hinckley to McDonald was typical. Hinckley commended the state for its aid to the war, emphasizing the importance of aviation as the "spearhead of action." He then added, "women have always been the fundamental background for teaching, and I feel that when they are properly trained

²Minutes of a Tennessee Bureau of Aeronautics meeting, 3 March 1941, Tennessee Bureau of Aeronautics History Collection, Tennessee Department of Transportation, Office of Aeronautics, Nashville (hereafter cited as TBA History Collection); Minutes of a Tennessee Bureau of Aeronautics meeting, 19 September 1941, TBA History Collection; Jackson (Tennessee) Sun, 1 December 1942, Scrapbook, TBA History Collection; and Keil, 66.
to teach aviation subjects that they can contribute much toward relieving man-power for actual combat fighting." In 1942, the year the Women's Auxiliary Ferrying Service (WAFS) and the Women's Flying Training Detachment (WFTD) were formed, the public and the government considered this sentiment to be patriotic. The time would come when this would change and they would accuse the women of taking jobs away from men.\(^3\)

On 2 September 1942, members of the TBA granted ten thousand dollars to establish the women's instructor program near downtown Nashville. Gillespie Airfield, a privately owned airfield, provided the flight facilities. The obvious choice to head the school was the "godmother" of Tennessee aviation, Phoebe Omlie. Finding other personnel, particularly instructors, was not quite as easy, as the TBA witnessed firsthand the extent of the instructor shortage. One instructor for all ground courses was impossible to obtain, so the bureau hired several on a part-time basis. The selection committee also had a bit of difficulty finding students.\(^4\)

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\(^3\)Robert H. Hinckley, Washington, D.C., to W. Percy McDonald, Memphis, Tennessee, 30 June 1942, Records of the Department of Commerce, National Archives.

\(^4\)Minutes of a Tennessee Bureau of Aeronautics meeting, 2 September 1942, Tennessee Aeronautics Commission Papers, Tennessee State Library and Archives, Nashville (hereafter cited as TAC Papers); and Minutes of a Tennessee Bureau of Aeronautics meeting, 27 November 1942, TAC Papers.
The TBA notified potential applicants, whom they picked from a list of women pilots furnished by the CAA. Original plans called for ten Tennessee women to receive the training. More than one hundred applications arrived from Tennessee. Just in case the number of in-state qualified applicants fell short, however, Phoebe accepted some 120 applications from bordering states. Applicants had to have at least 140 flight hours logged with the CAA; be unmarried, or if married, their husbands had to be active military personnel; and agree, upon graduation, to train men as pilots wherever the bureau placed them or to repay the bureau for their instruction at a rate of seven dollars per hour.⁵

The screening process began in mid-September when the TBA invited fifteen women to Nashville's Berry Field. In addition to flight hours and marital status, students were chosen on the basis of their teaching ability and physical fitness. Deciding their fate was the nine-member panel of Phoebe Omlie; Charles Ragland, TBA member; Colonel Herbert Fox, TBA executive director; Judge C.W. Phillips, a member of the State Highway Commission and an ex officio TBA member; M.M. Grubbs, of the local CPTP office; Captain Neal A. Miller, of the Army Air Forces Classification Center's

⁵Minutes, 27 November 1942, TAC Papers; (Nashville) Tennessean, 27 November 1942, Scrapbook, TBA History Collection; and Gene Slack, "Tennessee's Airwomen," Flying, March 1943, 128.
psychological unit; Willis Vick, flight instructor at Gillespie Airfield and one of the school's instructors; Charles A. Sebastian, instructor at Nashville's Hume-Fogg High School; and Mrs. John C. Gilmore, a local housewife. 6

Reports indicate that the examination process was difficult. In fact, when the committee made its final selections, only six applicants had passed both the committee's examination and the flight test. Phoebe turned to the out-of-state applicants for the remaining four students. On 21 September, the ten women arrived in Nashville to begin ten weeks of intensive training. They were: Lucille Biggs, a former school teacher and Gill Dove Airways (Martin, Tennessee) employee; Martha Childress, a George Peabody College graduate from Columbia, Tennessee; Jennie Lou Gower, a Cumberland University student and Vultee Aircraft assembly line inspector from Nashville; Cora McDonald, an aeronautical engineer originally of Hattiesburg, Mississippi, who had worked for Vultee as well as Bristol (Tennessee) Aircraft Company; Mary Elizabeth Pigg, a Vanderbilt University secretary and graduate, from Nashville; Margaret Josephine Wakefield, a former teacher and Peabody College and Vanderbilt student, from Nashville; Elizabeth Moody Hall, of Lexington, Kentucky, the daughter

6(Memphis) Commercial Appeal, 10 September 1942, Scrapbook, TBA History Collection; and (Nashville) Tennessean, 11, 14 September 1942, Scrapbook, TBA History Collection.
of missionaries to India and a big game hunter who had never seen an airplane until 1934 when she moved to the United States; Helen Jean Johnston, of Birmingham, Alabama, the wife of a major with the 127th Observation Squadron stationed in Tullahoma, Tennessee; Dorothy Moselle Swain, of Asheville, North Carolina, a former New York City art school student and ferrying pilot for Piper Aircraft in Lock Haven, Pennsylvania; and Emma Jean Whittington, of Hot Springs, Arkansas, who already held a ground instructor's rating in air regulations.  

All but one of the ten had received her flight training through the CAA's CPTP. Three, Pigg, Hall, and Swain, were members of the Civilian Air Patrol. Swain also held a Restricted Radio Telephone Permit. Johnston arrived with three hundred flight hours. She and Hall were the only married students. McDonald had flown twelve types of planes, while Wakefield had flown six. Considered as a group, the women, Gene Slack wrote, could be used as a "yard stick for women pilots. It showed that age varied from 20 to 33, that average height is 5 ft. 4 in. and that good

7Unidentified clipping, Scrapbook, TBA History Collection; (Nashville) Tennessean, 19 September 1942, Scrapbook, TBA History Collection; Student information sheet, Scrapbook, TBA History Collection; Unidentified clipping, Scrapbook, TBA History Collection; and Steve C. Grafton, Letter to the author, 27 September 1989.
looks are above the average with blue eyes and brown hair prominent." ¹⁸

Thanks in large part to aviation reporter Gene Slack and reporter Jane Eads, coverage of the school extended not only across Tennessee, but also to *Flying* and *Aviation* magazines, as well as to the *New York Herald Tribune*, the *Toledo Times*, the *Washington Post*, the *New York Times*, and papers in Boston, Minneapolis, and Lexington. Despite reporters' attempts to make the stories colorful, Phoebe eschewed the glamour of a school for women flight instructors. To Gene she complained about reporters' "window dressing" tactics of making women factory workers smear grease on their faces and let down their hair before they were photographed. And, while she admitted the inherent glamour of flying, added, as she scrubbed the floors of the old farmhouse to be used as a dormitory, that there was no glamour in her program. ²⁹

Phoebe may have been right. She had fought for more than a decade to promote the serious practicality of aviation. "There is too much glorification of flyers," she had long maintained. With an eye toward federal implementation of a women's instructor training program, she

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¹⁸ Slack, "Tennessee's Airwomen," 128, 130; Student information sheet, Scrapbook, TBA History Collection; and (Nashville) *Tennessean*, n.d., Scrapbook, TBA History Collection.

was determined to de-emphasize anything that might detract from the bureau's goal. Although Gene Slack focused on the "Gone with the Wind"-like atmosphere at the school, from the "vast old colonial house" dormitory, to a black cook named Lizzie and houseboy named Jim, conditions actually were rather Spartan-like. The women slept on wooden sportsmen's cots and covered themselves with state penitentiary blankets that Phoebe had procured with the help of Governor Prentice Cooper. Their day's schedule, six days a week, began at 6:45 a.m. and included calisthenics, ground courses, and flight instruction before 10 p.m. lights out. The regimen was comparable to that of regular Army cadets. Phoebe designed it so intentionally.¹⁰

"Phoebe was tough and she expected a lot" of her students, one of them remembered. The women studied aerial navigation, meteorology, engines, aircraft, and civil air regulations. Before graduation, the TBA required each to have forty-three hours flight instruction, eighteen hours supervised solo flight, 216 hours ground school, eighteen hours physical exercise, thirty-six hours flight instruction ground school, and 162 hours of mechanic's helper training, a personal touch of Phoebe's based on the program she had

just started for the CAA training men as military flight mechanics. Among the chores included in this course was recovering the wings of an airplane. Wings then were surfaced with heavy cloth and coated with a shellac-like substance called "dope." Phoebe's students learned this technique, which required hand-buffing after they applied each layer of "dope." Also built into the program were seventy-two hours of rest period and 108 hours of study time. The bureau noted that "the instruction is more than that offered by the Civilian Aeronautics Administration CPT Instructors program." But Phoebe's toughness earned her the respect and admiration, if not the affection, of her students.11

When McDonald and Fox questioned Phoebe about the program's strictness, she gave them two reasons, not the least of which was the close scrutiny of the CAA. She also noted that these women would be training men who would fight. "I want that instruction to be as perfect and tough as possible because the men's lives may depend on it. If we aren't tough on them, these women, they won't be tough on their students." Undoubtedly, the women were aware of this responsibility. In a welcoming dinner, they were reminded

11Emma Whittington Hall, North Little Rock, Arkansas, to Virginia Oualline, Oklahoma City, Oklahoma, photocopy to author, 19 February 1990; Unidentified TMs, Scrapbook, TBA History Collection; Minutes of a Tennessee Bureau of Aeronautics meeting, 2 September 1942, TAC Papers; and Emma Whittington Hall, telephone conversation with author, 15 March 1990.
of it, and especially of their responsibility to women in aviation. "Whether or not you succeed or fail in this course may prove the turning point for women in aviation in the United States," McDonald told them. Earlier, C.C. Bridges of the local CAA offices, had told them, "I know you will not fail us, although the course you are about to take is the stiffest to which pilots, women or men, have ever been subjected." Standards for women in organizations such as the Women's Army Corps were typically higher than those for men. In such non-traditional areas as the military, women had to be beyond reproach. There could be no question as to their qualifications if they, and their programs were to succeed. Phoebe realized that the same was true for the TBA's school.  

Press reports indicate that nearly every aspect of the women's progress was recorded. Phoebe compiled daily data on their work, while a CAA doctor gave them weekly physical examinations. "Flying has its own particular illnesses and diseases for which the doctor must keep a sharp lookout," Gene Slack reported one Sunday. According to the bureau, these illnesses were "physical fatigue and temperamental fitness."  

12 (Nashville) Tennessean, 30 September 1942, Scrapbook, TBA History Collection; and Unidentified clipping, Scrapbook, TBA History Collection.  

Despite the rigidity of the program, there were moments of diversion. Sundays were free for the women to do as they pleased. A tinny piano occupied part of the dormitory, and Dot Swain brought her guitar to the school with her for entertainment. As part of the 1942 Armistice Day celebration, the women flew in formation. And, Mother Nature provided a bit of excitement when the Cumberland River flooded. Normally, the women walked the short distance between the dormitory and Gillespie Airfield. On this occasion, Phoebe borrowed a boat and rowed the women to the air field and back.\textsuperscript{14}

The course was to have lasted ten weeks with another two weeks devoted to studying for the CAA Instructors Examination. Too many days of poor weather, however, caused the program to run long and to cost more than the allotted ten thousand dollars, topping at around fifteen thousand dollars. One of those days unfit for flight was 3 February 1943, as students, instructors, TBA officials, CAA Administrator C.I. Stanton, Governor Cooper, and others convened at Gillespie Airfield in the cold and wind for graduation ceremonies. Governor Cooper commended the TBA and the women, saying that he could "imagine no more

\textsuperscript{14} Slack, "Tennessee's Airwomen," 130; (Nashville) Tennessean, n.d., Scrapbook, TBA History Collection; and (Memphis) Commercial Appeal, 13 June 1942, Phoebe Omlie Information File, Memphis History Room, Memphis/Shelby County Public Library and Information Center, Memphis, Tennessee.
important work than that of training fighter pilots."
Stanton called Tennessee "one of the most progressive, if not the most progressive, state in aviation work" and added that these women "may be forerunners of a movement which will see from three thousand to six thousand women instructing future pilots of America." The future looked promising for these women, and others, as they received their custom-designed silver wings inset with three rhinestones and a star.\textsuperscript{15}

Armed with their qualifications, the TBA estimated that any one of these women could dictate where she would work, train from one hundred to three hundred cadets in ground courses per year, and under 1943 CAA contract rates, make between eight and ten thousand dollars annually. Military objection to their employment in civilian flying schools under contract to the CAA to train military pilots, both naval and army, was one possible obstacle to this scenario, however. Since there already were a few women instructors across the country in CAA-approved CPTP programs and women were providing Link Trainer instruction to military cadets, it seemed unlikely that the military would turn down these ten women.\textsuperscript{16}

\textsuperscript{15}Minutes of a Tennessee Bureau of Aeronautics meeting, 2 September 1942, TAC Papers; Minutes of a Tennessee Bureau of Aeronautics meeting, 27 November 1942, TAC Papers; and (Nashville) \textit{Tennessean}, 3, 4, February 1943.

\textsuperscript{16}Unidentified TMs, Scrapbook, TBA History Collection.
The women found jobs immediately across the country, although before hiring them some employers gave stringent flight tests, for which their strict training had prepared them well. On 22 February 1944, Charles S. Ragland reported to the Nashville Chamber of Commerce that the ten women had trained an estimated five hundred-plus men in the intervening year. Initial response to the women and to the program was positive. Five hundred women wrote to the bureau commending its pathbreaking program. Colonel John S. Jouett, President of the Aeronautical Chamber of Commerce in Washington, D.C., visited the school, as did CPTP school heads and "leading" women interested in preparing themselves for public service. Jacqueline Cochran even visited and tried to recruit the entire class into her Women's Flying Training Detachment program. As with other Tennessee programs, another state, neighboring Kentucky, expressed interest in copying it.  

As Fox noted,

State by state these courses could be started and carried on, but the enthusiasm among the women fliers ... indicated that as many as two thousand women,

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17 "Women Instructors Graduated," Aviation, April 1943, 239; President's Report to the 1944 Aviation Committee of the Nashville Chamber of Commerce, by Charles S. Ragland, President Nashville Chamber of Commerce, Chairman Aviation Committee, 22 February 1944 (Nashville: Tennessee Bureau of Aeronautics, 1944); Minutes of a Tennessee Bureau of Aeronautics meeting, 27 November 1942, TAC Papers; Unidentified clipping, Scrapbook, TBA History Collection; Dorothy Swain Lewis, telephone conversation with author, 3 May 1990; Hall, telephone conversation; and Unidentified TMs, Scrapbook, TBA History Collection.
both pilots and would-be pilots, would be available for the courses if they were offered nationally.

Since the beginning, federal implementation of a women's flight instructor school had been the bureau's goal. As early as 31 October, McDonald had written to bureau members that the TBA program was "getting results in Washington." One week later he reported to them that he had been to Washington where he met with Tennessee Senator Kenneth D. McKellar, a member of the Senate Appropriations Committee, and CAA Administrator Stanton concerning appropriations for the program. The Tennessee bureau wanted Congress to allocate $2.5 million to the CAA for a "program to be patterned exactly like we have worked out in Tennessee." McDonald proposed that a nationwide program would consist of at least ten schools, which could "produce five hundred instructors the first year" with a backlog of four hundred ready to enter the instructors course the next year. In the meantime, the TBA debated opening a second school after Christmas 1942 because federal legislation could not be acted upon "sooner than the date the second school would end." Little did anyone know what an understatement this was.19

18 Unidentified TMs, Scrapbook, TBA History Collection.

19 W. Percy McDonald, Memphis, Tennessee, to Colonel Herbert Fox, Judge C. W. Phillips, Charles Ragland, and John Lovell, 31 October 1942, TAC Papers; W. Percy McDonald, Memphis, Tennessee, to John Lovell, Charles Ragland, Judge C. W. Phillips, and Colonel Herbert Fox, 7 November 1942, TAC Papers; Minutes of a Tennessee Bureau of Aeronautics
Stanton encouraged the bureau in November 1942 to do so:

"The instructor problem is still critical and we are having difficulty in training and completing enough men to meet the requirements for elementary instruction. . . . I would strongly recommend that you continue with another class if finances permit, because I know of no more productive field in which to invest."

Nevertheless, the bureau, for unknown reasons, decided not to operate a second school. "Our job was to prove that women can do flight instructing. It is now the job of the federal government to train them. I believe they intend to do that," Fox told reporters at the graduation ceremonies.

The ultimate fate of the federal program remains unclear. Throughout the next two years, only sporadic reports on the women's program surfaced, and little mention was made in TBA meetings. The Memphis Press-Scimitar reported in early March 1943 that the House Appropriations Committee was hearing testimony on the bill in closed session. An April report from Aviation magazine noted not only that the bill was still pending, but also that

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meeting, 27 November 1942, TAC Papers; McDonald to Fox, Phillips, Ragland, and Lovell, 31 October 1942, TAC Papers; Unidentified TMs, Scrapbook, TBA History Collection; Minutes of a Tennessee Bureau of Aeronautics meeting, 27 November 1942, TAC Papers; and McDonald to Lovell, Ragland, Phillips, and Fox, 7 November 1942, TAC Papers.

20 Minutes of a Tennessee Bureau of Aeronautics meeting, 27 November 1942, TAC Papers.

21 (Nashville) Tennessean, 4 February 1943.
Tennessee had received one thousand applications. And, in an 11 February 1944 speech, one year after the women graduated, McDonald said that the bill still was pending. Mention of the program in Facts in Aviation abruptly ends, however, with "both the CAA and the Tennessee Bureau asked Congress to appropriate money to train other girls as instructors." And Fox, in one of the last written references to the program, laced his comments with bitterness.

While civilians were vainly urging the Army to use women pilots as instructors, the Bureau started the Tennessee Women's Instructor Research Program, training ten girls as instructors at a cost of $1,000 each. Everyone went into the 'pilot factory' of the country, while the Army was training women as service pilots [WASP] at a cost of about $25,000 each, only to have Congress condemn the program as wasteful and unnecessary.

The question is obvious. Did flak surrounding Jackie Cochran's WASP strike down the Tennessee program? Cochran started the WASPs in 1942 for much the same reason that the bureau started its program: to provide women for basic flight jobs, whether elementary instruction, or, as with the WASP, ferrying, target towing, utility flying, or test piloting, in order to use what qualified men there were for


\[^23\] Herbert Fox, "A State Grows Wings, 1944(?)" TMs [carbon copy], Scrapbook, TBA History Collection.
more "difficult" and combat jobs. By the end of 1943, however, there was no longer a shortage of instructors and pilots. There was a surplus. The CPT War Training Service (WTS) had supplied the military with 435,165 instructors and pilots by 1944. Congress refused to continue funding the program for fear of glutting the pilot market; the WTS closed completely. Likewise, the Navy cut its pre-flight program by half due to an unexpectedly low casualty rate among Navy and Marine pilots, thereby decreasing the number of instructors it needed.  

When Representative John M. Costello of California proposed militarization of the WASP in 1944, the women became caught up in this surplus. The press jumped on the military's bandwagon. Instead of women "freeing up" men for more important work, as both the WASP and the Tennessee program had intended in 1942, the press and some members of Congress accused the WASP of taking jobs away from men. It is likely that a nationwide Women's Research Flight Instructor School met its demise because of this controversy. But it hardly would have been logical for the CAA to sponsor a women's instructor training program when it had closed the men's program. And, despite the

bureau's findings that men student reacted "favorably under the patient guidance of women," the Army concluded differently. Most military men, it said, considered women pilots to be inferior to men pilots; the women would have to do a much better job than the men to prove themselves. The Army also contended that it would be bad, psychologically, "for an aviation cadet if a Wasp and not a male Air Corps graduate were his instructor." This conclusion may have extended to other women instructors, as well.  

McDonald intended his experimental program to prove the worth of women in aviation and to be an indication of Tennessee's contribution to the war effort. But despite the program's good results, and the fact that some of its graduates continued to train air cadets until the war ended, when it came down to choosing between men and women for flight instruction, the women lost. The military no longer needed them.

CHAPTER SIX

WASPS FACE POSTWAR ADJUSTMENTS:

JENNIE GOWER AND JANET HARGRAVE

In 1946, there were 5,164 women pilots in the United States, compared to 359 in 1937. But curtailment of wartime programs, especially the grounding of the Women Airforce Service Pilots (WASP), clipped their wings. "Flying is a habit hard to break," however, and some women seized upon the chance to turn their experience into careers after the war. Two who did were Janet Hargrave and Jennie Gower, former WASPs, whose postwar experiences testify to the scarcity of jobs for women in the air. For a brief time, however, Tennessee's air-mindedness provided several options. 1

Jennie and Janet came from diverse backgrounds, both in their lives and in their flying careers. Born and reared in Nashville, Jennie Gower was the only daughter and middle child of Lemuel H. and Marie Hudson Gower. Her parents taught at the city's Industrial School before opening a country store near the Glencliff area, where her father also

raised champion bird dogs and field trial winners. Growing up, Jennie was a good student and athlete—the All-American girl who also loved to raise hunting dogs with her father, hunt quail, fish, and ride horses. Like her pioneer ancestors who helped to settle Nashville, Jennie was adventuresome, finding her frontier in the air. It was inevitable that she would fly—from the day that she climbed into the magnolia tree in the family's front yard, "waved her arms like wings, and jumped." In 1940, when she enrolled at Cumberland University in Lebanon, Tennessee, she joined the Civil Aeronautics Administration's Civilian Pilot Training Program (CAA CPTP) and got her chance to fly.2

By 1942, at age twenty, she had completed the secondary CPTP course at Vanderbilt, accumulated 137 hours in the air, and gained acceptance to the Tennessee Bureau of Aeronautic's (TBA) Tennessee Women's Research Instructor School. Graduation brought for her and fellow student, Dot Swain, jobs training Navy cadets in Portales, New Mexico. But their jobs did not last long, because the Navy cut its cadet program. By June 1943, just four months after leaving Nashville, she and Dot were in Sweetwater, Texas, at Avenger Field. There they taught male Army Air cadets until the

last class shipped out in early summer 1943 and the base became the home of the WASP. Then they gave them primary training. Despite Phoebe Omlie's insistence to her students that teaching was the area in which women could best serve their country, Jennie and Dot found otherwise. In February 1944, they resigned as instructors and joined the WASP as students, graduating in June 1944 with class 44-W-5.3

WASP assignments were either to the Ferry Command where they ferried aircraft from manufacturer to air bases, or to training bases where they towed targets, tested aircraft, simulated strafing, flew utility assignments, or did other such work. In Columbus, Mississippi, Jennie and Dot tested AT-10s. After a transfer to Laredo, Texas, they towed targets for gunnery practice, a sometimes hazardous task when the cadets used live ammunition. Because of their extensive experience, the Army also allowed them to test fly pursuit planes. All planes that had been repaired, including pursuits, such as the P-47 Thunderbolt and the P-51 Mustang, had to have five hours flight time before they

3 Student information sheet, Scrapbook, Tennessee Bureau of Aeronautics History Collection, Tennessee Department of Transportation, Office of Aeronautics, Nashville (hereafter cited as TBA History Collection); Dorothy Swain Lewis, telephone conversation with author, 3 May 1990; "Licking Readjustment," Janet Hargrave, Scrapbook; While Jennie Gower trained male Navy air cadets in Portales, New Mexico, her brother, Herschel, taught a course in airplane structures and hydraulics at the Naval Air Base in Millington, Tennessee. Among his students were WAVES and women Marines, as well as male Navy and Marine personnel. Unidentified clipping, Jennie Gower, Scrapbook; and Lewis, telephone conversation, 3 May 1990.
went back into action. By 1944, WASPs had taken over a significant portion of pursuit ferrying, and the Army Air Forces trained them specifically for flying the high-powered fighter planes. But Jennie and Dot received no such instruction. Their training consisted of sitting in the cockpit with a specification book for that plane type at their side and memorizing the location of the various instruments. Once they felt comfortable with the cockpit layout, they started the engine and took off. But neither minded the hands-on training procedure. "We felt lucky to be able to fly those planes in the first place," Dot remembered.4

Stationed with Jennie and Dot in Laredo was 44-W-5 classmate Janet Hargrave. Unlike Jennie and Dot, Janet had no piloting experience before the war. The older daughter of a World War I aerial gunner, she went on her first flight at the age of nine. Strapped into the front cockpit of an open plane with her father, she loved the thrill of it, but had never pursued a pilot's license. While her two friends had been trying to find ways to fly despite the prohibitive cost at the turn of the decade, Janet, of San Gabriel, California, was concentrating on getting into UCLA and a sorority. College life meant classes and social activities,

not flying, as it did for Jennie and Dot. It also meant turning a deaf ear to the war in Europe: students at UCLA burned their radios to show their isolationist stance. But after Pearl Harbor, things changed. Janet became totally immersed in the military, and thought, "I'm an American; I must do something." As other women marched off to join the Women's Army Corps, Women Accepted for Volunteer Emergency Service, and other women's military service branches, Janet, upon graduation in 1943, obtained permission from the U.S. Department of Commerce to take flying lessons for the war effort. Coastal restrictions in California forced her inland to Independence, California. A clerical job with Vega Aircraft provided her with the needed $390 for instruction and fifty hours flight time, enough to qualify for a private pilot's license and for the WASP.⁵

Janet's first contact with the South came with her assignment to Maxwell Army Air Force Base in Montgomery, Alabama. There she tested B-24s after maintenance, but primarily did utility work, "carrying passengers, targets, papers and anything else the air forces wanted taken from one place to another." September 1944 brought with it a

⁵Janet Hargrave, telephone conversation with author, 26 May 1990; Janet Hargrave, Letter to author, 30 April 1990; Janet Hargrave, telephone conversation with author, 10 February 1990; "Licking Readjustment," Janet Hargrave, Scrapbook; and Harry Ross Aeronautics, Manzanar, California, to N.S. Ward, Civil Aeronautics Administration, 18 May 1943, Janet Hargrave, Scrapbook.
transfer to Laredo, Texas, where she was reunited with Jennie Gower and Dot Swain. But one month later, Jacqueline Cochran and General H.H. "Hap" Arnold informed the WASP of their decision to disband the organization on 20 December 1944. "The war situation has changed and the time has come when your volunteered services are no longer needed," Arnold told them all in a form letter. "The situation is that, if you continue in service, you will be replacing instead of releasing our young men. I know that the WASP wouldn't want that."  

After six months active duty with the WASP, Janet returned to San Gabriel, "and began thinking about what to do next." It was Jennie, at home in Nashville, who provided the answer. The government was selling surplus light airplanes to the public; they would start their own flying service with one of them. Since restrictions in California still hampered civil aviation, Janet packed up and headed to Nashville. The two filled their days with "civilianizing" the little Army L3B, including giving it a new coat of paint and identification numbers. Janet also had to earn her instructors' rating, which she did under Jennie's tutelage. By the end of the war in August 1945, they were ready for

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business, and found a home at Cornelia Fort Airpark. Named in honor of Tennessee's fallen ferry pilot, it opened that month, although it was not yet completed.7

Jennie and Janet's Tennessee Sky Service was not the only flying service located at the new airpark. "All manner of pilots thought teaching was the way to go," and four or five others opened there as well. But seven days a week, Jennie and Janet arrived at the airpark by eight or nine in the morning and set about their typical day's schedule of housekeeping, plane upkeep, hangar flying, and flying. They advertised that they would tow banners and provide short cross-country flights, but most of Tennessee Sky Service's business came from teaching. And most of their students were ex-servicemen taking advantage of the GI Bill and flying at the government's expense. "And still they come," Janet wrote. "Flocking to the airports by the hundreds, most all of them veterans, most all of them eagerly wondering when they'll ever learn to land the darn thing and solo." Only one of their students was not on the GI Bill, and his uncle paid the ten dollars an hour course cost.8

The GI Bill could provide only so many students for Tennessee Sky Service, especially with the numerous competitors at the airpark. As business tapered off, Jennie

7 Janet Hargrave, to author, 18 March 1990; and "Licking Readjustment," Janet Hargrave, Scrapbook.

8 Janet Hargrave, to author, 18 March 1990; and Nashville Banner, 26 July 1946.
and Janet began to look elsewhere to continue their flying careers. For a while, they taught for Colemill Flying Service, which had "emerged as the giant" at Cornelia Fort Airpark. Then they applied to teach flying at Stephens College in Columbia, Missouri, but the school accepted only Jennie. In going to Stephens, she joined fellow Nashvillian and Tennessee Women's Research Instructor School graduate, Margaret Wakefield. The Stephens program began in 1941 to train students for careers as aviation "personnel workers, meteorologists, Link Trainer operators, ticket clerks, reservationists, [and] control tower operators," all acceptable women's work. Nearly eighty students each semester qualified for actual flight training, with the possibility of logging enough hours to qualify not only for a private pilots' license, but also for a commercial license or instructor's rating. Jennie left Nashville for Stephens in late September 1946, and taught there for the 1946-47 school year.9

In March of 1946, Janet had begun to write "Air Scoop," an aviation column, for the Nashville Banner. After Jennie left, Janet stayed in Nashville, continued to work for Colemill Flying Service, where she was the only woman instructor, and to write for the newspaper. The two jobs complemented each other, since she gathered news at the

9Janet Hargrave, to author, 18 March 1990; Arlene Shoemaker, "Air Schooling for Milady," Flying, November 1945, 42, 39, 112; and Nashville Banner, 26 September 1946.
flying service for her column. "Air Scoop" ran weekly until 1949. It kept local aviation enthusiasts informed about fellow enthusiasts' activities, who had soloed or had received his or her license during the past week, for instance, and what events, such as air shows or meets, were coming to the area. But "Air Scoop" also tackled issues such as air safety and the status of the air industry in Tennessee and throughout the country. Through it all, however, Janet stressed air-mindedness: "Even if you don't want to fly, take a ride out to your nearest airport, watch the planes, get acquainted with some pilots; keep your feet on the ground if you have to, but be AIR-MINDED." She also contributed several articles to Flying magazine.10

Not only did Janet write. In June 1947, Marguerite Shelburne featured her and other southern women pilots in an article for Holland's magazine. Shelburne noted that Janet's small size, gender, and age (only twenty-six), at first caused her students' misgivings about her ability. But these "vanish early in the course of their instruction." Janet's fellow instructors also noted her capabilities as a teacher: "She is the most thorough and capable instructor I've ever seen," one reported. "She is so patient and conscientious that her students are ready for their private

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10 Janet Hargrave, to author, 18 March 1990; and Nashville Banner, 11 July 1946.
license, by less exacting instructors' standards, before she lets them solo."  

Janet's life centered on flying until late 1949. By then, civil aviation was waning. Just as Gene Slack received notice from the TBA, one day Janet received "that fateful letter [from the Nashville Banner].... air mindedness was no longer news." She also grew tired of a grueling, six-day-a-week work schedule at Colemill. In January 1950, she left Nashville for a new life at home in Southern California.  

My flying days, my Tennessee days were over. It was a lot like finishing a book. I loved it. I read every word, but the time had somehow come to look elsewhere for my life. I was then 30, and surely no Beryl Markham. Life was beginning in earnest.  

11 Shelburne, "Women Spread Their Wings," 9, Janet Hargrave, Scrapbook.  

12 Janet Hargrave, to author, 18 March 1990.  

13 Ibid.
CONCLUSION

The examples of these women who flew in Tennessee show that women found a limited place in aviation after World War II. This was true for several reasons, including the prewar role of women in the field, the changing nature of aviation, and postwar expectations of women in society.

Because women pilots in the 1930s continually downplayed any exceptional talent or skill that enabled them to be good pilots, they established a narrow place for themselves in the field as "nurturers of public confidence in flying," in its safety and ease. By the early forties, the American public accepted the practicality and safety of aviation. Men who operated airlines no longer needed to hire women pilots as a publicity ploy. Nor did they have to point to them as proof that anyone could pilot a plane. With the acceptance of such a specialized role in aviation, women "had worked themselves out of a job." Only the pilot shortage of World War II enabled them to take their piloting skills to a point that otherwise would never have been possible.¹

It is significant that most of these Tennessee women earned their pilot's licenses in the late thirties and early forties. If they had learned to fly a few years earlier or later, their experiences would have been more limited than they were. But women also found themselves grounded after the war because of the changing nature of aviation. Tennessee offers an excellent example of this change.

Despite the Tennessee Bureau of Aeronautics' (TBA) accomplishments throughout the late thirties and forties, by 1950, the euphoria surrounding aviation was gone. The surge in civilian pilot students experienced immediately after World War II diminished as did the government financial backing through the GI Bill. Janet Hargrave noted the potential for trouble in "Air Scoop" on 3 October 1946. "If the GI flying IS going to continue for a long and indefinite period then there is no need for alarm, but if it is not, then flight operators had better start looking for business for there are too few students and private pilots who are not flying at the government's expense."²

By 1949, the number of persons training in Tennessee for their private licenses had dwindled sharply, as "Air Scoop" reflected. No longer did Janet devote paragraphs to

naming those who had soloed, flown cross-country, or earned their private wings. Instead, she could list them in a few sentences. Although military and commercial aviation prospered, "the fact is," she wrote, "aviation of a local, private nature didn't exactly flourish." There would be no "roadable" airplane, nor an airplane in every garage. The TBA's 1944 predictions that "the day will soon come when Tennesseans will fly their own planes by the thousands," and that by 1950 there would be fifty thousand pilots in the state, seemed overly optimistic in the face of reality. The year 1950 saw only twenty thousand pilots in Tennessee.  

The nature of the Civil Aeronautics Administration (CAA) also changed in the late 1940s because President Harry Truman had appointed more "non-aviation" people to its hierarchy. One who was not pleased with the development was Phoebe Omlie. "For some time I have sat in planning discussions controlled mostly by bureaucrats who have had no actual experience in civil aviation, and watched them agree to regulations and taxing policy that must eventually force civil aviation to the wall," she told reporters in 1952.

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Because of these changes, she resigned in protest and remained out of aviation for the remainder of her life.  

These changes, both in the nature of aviation and in the composition of the CAA, brought more and stricter regulations. In addition, the overall expense of learning to fly still proved to be a deterrent for all but the most devoted private pilot, man or woman. But, to some extent, discrimination also kept more women from learning. "There are still men who think aviation is strictly a man's game."

Some of these, Holland's reported in 1947, were among those who gave flight tests and approved applications for commercial licenses. "These men are not always influenced by performance alone, some women feel, but by the fact that the applicant is a member of the so-called weaker sex."

Even some women maintained that "it's all 'bunk' to say women are better pilots than men. We aren't. Most women don't have the mechanical talent or physical stamina of average men pilots." That women flew sixty million miles in all types of military aircraft during the war counted for little afterwards. Both women pilots and women defense workers found that advances made during times of crises

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usually prove temporary. It would take more than war to change the status of American women. It would take a change in society's attitudes about women's proper place in it.5

Societal restrictions on women compounded those in aviation itself. As American society had before the war, postwar America emphasized the home and family as woman's primary responsibility. Not all women gave up flying because of a home and family. Jane Hilbert continued to make it her career until the mid 1960s. Dot Swain, who spent one year teaching flying in Daytona, Florida, after the war and became a commercial flight examiner, continued to fly until she retired as a private school teacher. But although she kept her license current, flying always took a backseat to her family, her teaching career, and her art.6

It was family coupled with expense, however, that caused women such as Lorraine Buttrey, Gene Slack, and others to ground themselves. Of these women, Jennie Gower may have come closest to fulfilling the TBA's vision of private aviation by landing a small plane in a field beside


6Rothman, 225; and Dorothy Swain Lewis, telephone conversation with author, 3 May 1990.
her parents' home in Nashville, going in for dinner, and
taking off again afterward. Yet even she gradually withdrew
from flying after returning to Nashville in 1947 and quit
flying entirely when she married in 1950.7

The paths that these women's lives took were not
unusual for the time. As World War II ended, employers in
all manner of defense industries pushed women back toward
the home by laying them off in favor of returning veterans
and other men. A typical sentiment was that the women would
welcome returning to the home, caring for their families,
and cultivating a social life. So, too, Jacqueline Cochran
and other WASP administrators expected that their women
would leave aviation. "Their careers will be marriage,"
WASP Public Relations Officer Hazel Taylor told a Time
reporter in 1944. Cochran, herself, estimated that only
one-fourth of the WASP would continue in an aviation-related
field, and forecasted that they would have a place piloting
small commercial planes or those for small feeder lines, as
well as having a place as air traffic controllers. "And
they are ideal in the training of air students," she added.
For the most part, this is where women pilots found work:
private flight instruction. The only other place for women
in the air was as hostesses on commercial airlines--in a way

7Edwin Gower, interview with author, Nashville, 16 May
1990; and Herschel Gower, Letter to author, 19 March 1990.
continuing to "sell" aviation by making it "homey" and comfortable.\(^8\)

If private aviation had developed the way most predicted that it would during the 1930s, women might have found a larger place as pilots, but it is likely that they still would have been held to areas acceptable for women. The emphasis in aviation, however, shifted to military and commercial flight. Although the Air Force allowed former WASP in its reserves, the women could not pilot planes. And Phoebe Omlie's observation in the mid-thirties that people would not fly commercially with women pilots held true in the 1940s with airlines who accepted the idea without testing it. In fact, Helen Richey was the only woman until the 1970s to work as a commercial airline pilot. As the experiences of Janet Hargrave, Gene Slack, and the content of the Stephens College curriculum show, they could work for an airline in an office job or at the ticket

counter or write about flying, although "air-mindedness was no longer news" by the late 1940s.  

Nevertheless, while historian Joseph J. Corn has likened early women aviators such as Amelia Earhart to Jane Addams and Eleanor Roosevelt for using their femininity to further their causes, in this case flying, these Tennessee women pilots represent other women, who in less visible and literal ways, were beginning to stretch their wings in the late thirties and early forties. Young women learning to fly at decade's end were spiritually akin to women who rushed to join the Women's Army Corps, Women Accepted for Voluntary Emergency Service, and other women's service branches, and to those who relished work outside the home in defense industries. Although society encouraged women to remain in the home and to be dependent on a man for support, many tested their independence. Flying, at a time when parents often forbade their daughters to learn to drive, was one means of establishing autonomy. For some, flying, like a college education or work, was a diversion before marriage and a family. It was an adventure and a challenge; it was exciting. "I always found flying exhilarating." Janet Hargrave explained. "No matter how I felt driving there [the airpark], after the first flight I was buoyed up for

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9 Janet Hargrave, Letter to author, 18 March 1990; Hartmann, 47; and Corn, The Winged Gospel, 80.
the day. Looking back it was a special kind of work out. Like a jogger's endorphins—mine got zinging flying."^{10}

These women in Tennessee show that for most women pilots of the late 1930s and early 1940s, even those who never married or had families, flying was a part of youth. (This also is reflected in the answers to Gallup Polls for 1939 and 1946; as the age of the respondents rose, their desire to learn to fly declined.) Token openings in government programs spurred on their participation, which reached its zenith with wartime programs.

Yet, the women who participated in these programs realized that flying was a temporary diversion. In Sweetwater, Texas, WASP Jennie Gower pasted a well-known poem in her scrapbook that must have expressed how she felt about flying in the WASP: "What has been, has been," it ends, "and I have had my hour." Undoubtedly, many others joined Janet Hargrave in leaving flying to begin life "in earnest." Little by little these women gave up flying for various reasons, including the limited opportunities for women in the field, "money, time, effort, and the business of living in an entirely different way safe and apart from the airport and the direction of the wind." They missed flying, but as they aged, life's choices steered most of them away from the air and into more traditional women's

^{10} Corn, The Winged Gospel, 85; Ware, 14; Janet Hargrave, to author 18 March 1990; and Corn, The Winged Gospel, 80.
areas such as teaching, office work, and social work.
Although they retained their interest in aviation,
"adventure, if it were to be pursued, lay elsewhere.
APPENDIX

AAF: Army Air Forces
AWA: Aviation Writer's Association
CAA: Civil Aeronautics Administration
CPTP: Civilian Pilot Training Program
NACA: National Advisory Committee for Aeronautics
TBA: Tennessee Bureau of Aeronautics
TCPTP: Tennessee Civilian Pilot Training Program
WTS: War Training Service
WAVES: Women Accepted for Voluntary Emergency Service
WASP: Women Airforce Service Pilots
WAC: Women's Army Corps
WAFS: Women's Auxiliary Ferrying Service
WFTD: Women's Flying Training Detachment
WPA: Works Progress Administration
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