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**Research Materials/Source Documents
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FILE TITLE: Women Aviators

Reviewed by:

AFEHRI Representative G.R. Akin date 31 DEC 97

EPC Representative Frank C. Nulit date 24 MAR 98

Scanner Operator Erving J. Jones date 10 Apr. 98

APPROVED BY: Gary R. Akin
GARY R. AKIN, CMSgt, USAF
Director
Air Force Enlisted Heritage Research Institute

WOMEN OF FLIGHT

fil 19-22-1
J.C.

- 1 First women of Flight
 - a. In Europe women where flying in balloons (1834,22 women pilots.)
 - b. In Europe Mrs Hart O. Berg was the first women passenger at Auvers, France 1908.
 - c. Mrs Berg was also credited with the "hobble skirt"
- 2 First women in America to fly as passengers.
 - a. Mrs. Ralph Van Deman was a passenger at Washington, D.C. 1909 in a Wright airplane.
 - b. Mrs. Van Deman's husband was a Capt. in the US Army.
"now maybe there will be peace in my family"
3. First women to fly fixed wing aircraft.
 - a. Mrs. E. Lillian Todd built her own airplane (a glider with fans 1906, at Aero Club of America)
 - B. Mrs. Blanche Scott first solo 1910 at Hammondsport,N.Y. by mistake or maybe not,because Curtiss was not to happy in teaching her to fly.
 - c. Mrs. Bessica Raiche First Woman Aviator of America
 1. Accomplished musician,painter, and linguist.
 - d. Mrs. Julia Clark first women to be killed in an aircraft crash in Springfield,Ill. 17 June 1912 after just recieving her license in May the same year.

1 Feb 19-22-1
J.C.M.

Women in Aviation

Women started out in balloons as passengers and later as pilots one of the first was Mrs Cora Thompson who thought it was a very pleasurable experience to float over the ground with all the peace and quiet of balloon flight. Mrs Rosenberg was also one of the early women in flight of balloons and her comment was "it is not as dangerous as automobiles because you did not have the Police, Kids and horses to put up with."

Later women became passengers in heavier than air air craft (which we know as airplanes today) and in France Mrs Harriet O. Bug became the first American woman to fly and she had her skirt tied at the ankles to keep it from blowing up. This was what was later designed into what was known as the hobble skirt and became a fad in Europe and the U.S. in the early 1900s.

In the US women were beginning to want to fly more and more but our society was not allowed this privilege but they persisted and Mrs Ralph Van Deman was the first to go up in a Wright airplane in Washington D.C. with the help of her husband who

Was a Capt in the US Army at that time this was in 1909. ~~It~~

So you see not only men but a ~~lot~~ few women were beginning to get interested in flight and the more they did it the more they love it. ~~Myself~~

My feelings are these early aviators got the most wonderful feel of cutting thier earthly bonds and soaring like a bird over this big green world we live in. This is some thing we do not experience today because we do not fly in open aircraft as they did.

To get back to women in flight. The women were starting to make a name for them selfs but with all beginnings in thing there are some trageages like Mrs Julia Clark was the first lady killed in a aircraft accident. This did not stop other ladies from going ahead in trying to fly the early airplanes.

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Jaqueline Cochran (1910-1980)

Born in Pensacola, Fla
an orphan at infancy
Raised in Columbus, Ga

Three wks Training in 1932 got license

First woman in Bendix Transcontinental Race 1934

She won in 1938

International League of Aviators

Worlds Fastest Aviator in 1937, 1938, & 1939

First woman to ferry a bomber to England

She organized and headed The Womens Airforce
Service Pilots (WASP) in WWII

She also headed the civil cosmetic firm.

3. Georgian "Tiny" Broddwick
a. Parachute from Balloon First

4. Blanche Scott
a. First Woman Pilot
b. Taught By Curtiss at H-port
c. Did not Trust her
d. She flew by Mistake

5. Bessie Raiche
a. Pilot and physician
b. Curtiss biplane

6. Julia Clark
a. First US woman Killed in Airplane

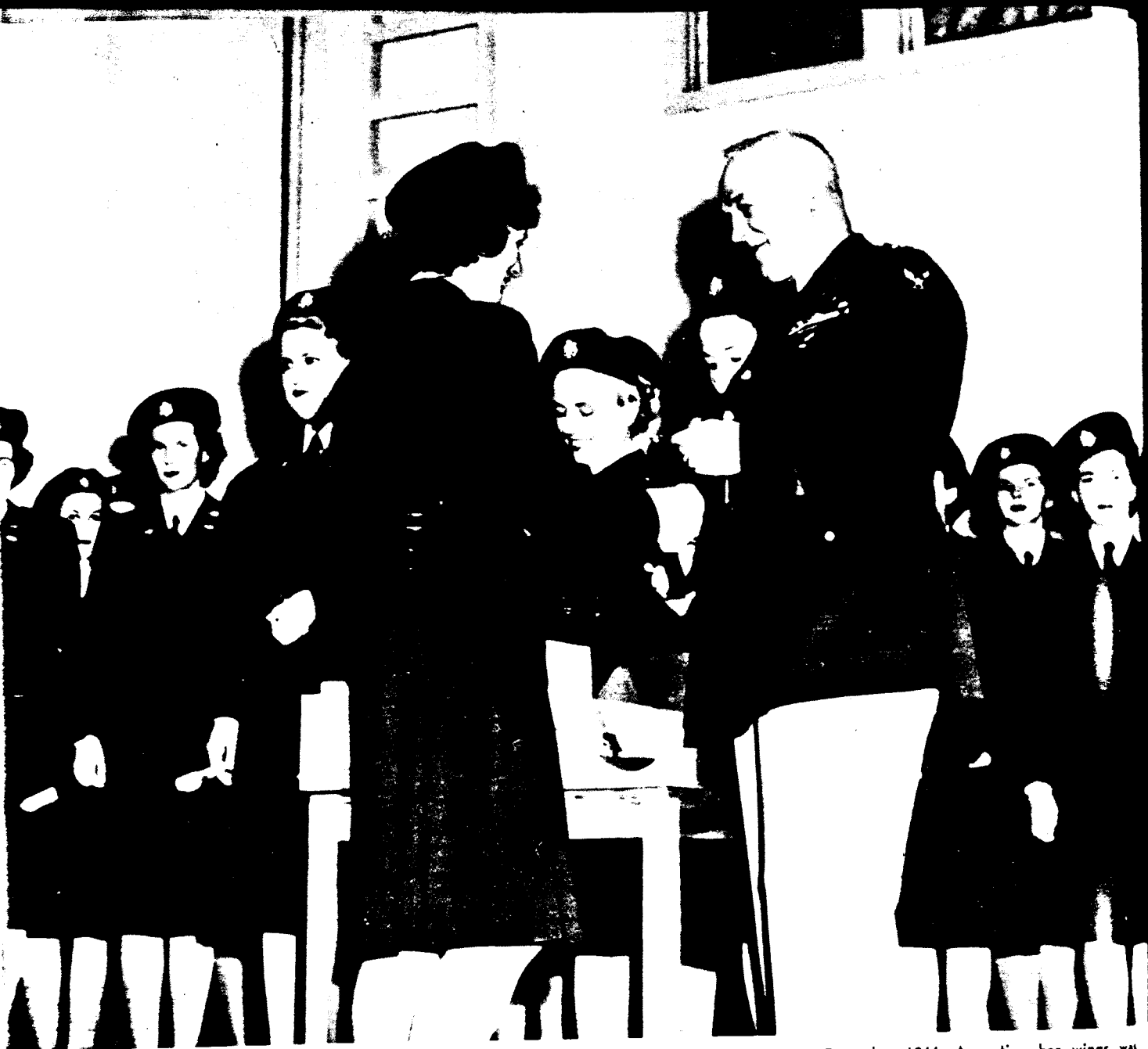
7. Alys McKey Bryant
a. Trained WWI Pilots

8. Harriet Quimby
a. First Lady to get pilots license "37
b. Sec Woman to Recieve World license
c. Died from fall out of aircraft

9. Matilda G. Schantz
b. Sec To get License "44

10. Ruthie (Sue)

- (a) 1916 three world records
 - (A) Nonstop cross country Record 24,000 miles
 - (b) Sec 1st world Nonstop
 - (c) World Nonstop Record Sec 1st
- (b) Earned \$9000 a wk for her solo flight.
- (c) First woman allowed to wear noncommissioned Army officers uniform.
- (D) set womens altitude record of 14,000 ft 1917



Last class of Wasp received their wings from General H. H. Arnold at Sweetwater, Texas, in December 1944. Accepting her wings was Carmel LaTorra of Greeley, Colorado. At the podium, from left, were Miss Jacqueline Cochran, Mrs. Ethel Sheehy and Mrs. Cliff Deaton. Graduates shown, from left, were: Florence Emig, Gail Sigford, Maj. Nina K. Morrison (now an active duty WAF), Mary Anna Martin, Barbara Searles and Kathleen Hildebrandt. (Official Photos U.S. Air Force).

THE WASP OF WORLD WAR II

By LT. COL. ANN R. JOHNSON

Introduction by
COLONEL JACQUELINE COCHRAN

Over the years I have established a number of "firsts" in the air and set many air records. From the start of 1941 until beyond the end of 1944 I gave my time entirely to the war efforts of the British and our own country—first flying in England as a part of the British Air Transport Aux-

iliary and then back home heading up the recruiting and training of women pilots to do noncombat flying for our United States Air Force. The Commanding General of our Air Force, General H. H. Arnold, selected the name "WASP" for these women pilots (which stands for Women's Air Force

Service Pilots). By December 1944 when the WASP program was deactivated, I had more than a thousand of the women pilots on operational duties.

This great and highly successful experiment in military aviation was among the most important accomplishments of my flying career. For and other war services I had the Distinguished Service Medal pinned on me by General Arnold, and the

done as a result of citation over the signature of President Franklin Roosevelt.

In 1954 in my autobiography titled *In the Stars At Noon* I devoted a chapter to the story of the WASP.

Now Lt. Colonel Ann R. Johnson has prepared the accompanying article on the WASP for the Air Force Historical Foundation.

I commend her for the exhaustive research she has undertaken and her accuracy in dealing with the facts. She is one of the couple of thousand reasons I am proud of the WASP.

* * * * *

On 20 December 1944 an unparalleled experiment in military aviation came to a close; America's women military pilots were grounded. The experiment that put them in the air was so daring and so advanced that now, 26 years later, it has never been tried again. Yet its success was attested to by everyone who came in contact with it. General Arnold said of it: "If another national emergency arises—let us hope it does not—but let us this time face the possibility—if it does, we will not again look upon a women's flying organization as experimental . . . A pioneering venture, yes; solely an experiment, no. The WASP are an accomplishment."

The General spoke at a farewell ceremony, 7 December 1944, for the Women's Air Force Service Pilots (WASP), which was disbanding. The ceremony was held at Sweetwater, Texas, the main WASP training base. General Arnold recalled the first time he thought of using women to pilot military aircraft, in the summer of 1941. At the time, the prospect of global conflict loomed on the American military horizon, and General Arnold faced the questions of how many American men could be trained to fly possibly thousands of aircraft and how fast they could be trained. The general's concern was for a young, growing Air Force, which he knew could be asked to shoulder a heavy burden in event of all-out war. Untold numbers of highly-motivated, technically-inclined young men would be needed for pilots and General Arnold knew he would have to compete with ground forces, service forces, Navy and Merchant Marines for them. Other Allied nations faced the same problem. England and Russia had been forced to use women to fly trainers and combat-type aircraft. Russia was even using women in combat ground forces.

"Frankly, I didn't know in 1941 whether a slip of a young girl could fight the controls of a B-17 in the



WASPS and "The Jungle Queen" at Love Field, Dallas, Texas. Can anyone identify these fledgling fliers?

heavy weather they would naturally encounter in operational flying," General Arnold recalled. In the emergency, he called in Jacqueline Cochran, who had already flown almost everything with wings. In fact, General Arnold pointed out, she "several times had won air races from men who are now general officers of the Air Force." He asked her to draw up a plan for the training and use of American women pilots.

In late 1941, Miss Cochran presented her plan. She was given access to medical and flying records of every woman pilot listed in the files of the Civil Aeronautics Administration. The records showed that almost all the approximately 3,000 licensed women pilots would need advanced training and some would even need basic and primary instruction. There were about 100 women pilots who would not require further flying in-

struction, but even these would need transitional training to qualify as military pilots.

It was obvious a training program would have to be established if women pilots were to be used. At this time, however, there was an even greater shortage of planes than pilots.

The Commanding Officer of Ferry Command was agreeable to hiring civilian women pilots on the same basis as men. (The men being used in ferry work were those who could not be militarized for such reasons as being over-age, employees of manufacturers, employees of airlines, etc) Miss Cochran felt that, unlike the men, the women would have direction and discipline in non-operational as well as operational activities. Yet the project as recommended in the fall of 1941 was turned down by higher authorities, primarily because, at least for the time being, there were more than

enough male pilots to handle available aircraft.

Shortly thereafter, the British Air Commission, with the approval of General Arnold, requested Miss Cochran to recruit and bring to England, for ferrying duties, a group of American women pilots. In the spring of 1942, 25 American women pilots went to England in a uniformed civilian capacity with the British Air Transport Auxiliary under 18-month contracts. They were the first organized group of American women pilots to serve in the air in World War II. One of this group, Mary Nicholson of Greensboro, N.C., lost her life in the service. Others retired and some continued to do ferry work in England. This group represented a preliminary step in the development of a large-scale Army Air Force women's pilot program in the U.S.

At home a women's pilot program was activated between September 10 and 14, 1942. An experimental squadron of experienced women pilots, headed by Mrs. Nancy Harkness Love, was formed to do ferry work for Air Transport Command, with only four to six weeks of transitional training to acquaint them with operation of military aircraft, military organization, routes and related procedures. They were known as WAFS—Women's Auxiliary Flying Squadron.

Concurrently, Miss Cochran returned from England to inaugurate a

women's pilot training program with headquarters at Fort Worth, Texas. The two programs were independent. The WAFS, located at Newcastle Army Air Base, Delaware, consisted of 30 women, and all but two completed training and went into operational duties.

The announcement that a program to train women pilots was coming into being brought a flood of inquiries. The time was late 1942, and the U.S. had come as close as it ever had to total mobilization. Every able-bodied man in America was scrutinized for military or other military support or civilian essential jobs. American women, with their men off to war, wanted to do their part, too, and many went to work in defense plants and held other "men's" jobs. This was the era of "Rosie the riveter."

Franklin D. Roosevelt became the first President to realize that America's great hidden source of manpower was womanpower. It was the use of womanpower in industry, in fields previously unthought of as anything but man's work, that enabled aircraft manufacturers to raise production to new highs. As aircraft rolled off the assembly line, it was increasingly apparent that the pool of male pilots, trained and in-training, was insufficient.

Miss Cochran insisted that her women pilots be clean-cut, stable young women, of the proper age, educational background and height,

who could prove the required number of flying hours, duly certified in a log book. Recruitment began with flying teams of Miss Cochran's representatives visiting every section of the country. Candidates were interviewed, then permitted to make formal application only if they looked good to the interviewer. Next, they were scheduled for physical examinations by a flight surgeon. All the results were sent to Miss Cochran, then Director of Women's Flying Training in A-3 of the Flying Training Command General Staff at Fort Worth. Central selection was continued until April 1944 when applicants were required to take the Aviation Cadet qualifying examination. In cases where a woman was already in a government or war industry position, a letter of release was required from the War Manpower Commission for her to transfer to the Women's Pilot Training Program.

Minimum requirements for the original WAFS were: 21 through 35 years of age, high school education, commercial pilot license with 200 hp rating, not less than 500 hours of logged and certified flying time, American citizenship and cross-country flying experience.

For student pilots, the age, education and citizenship requirements were the same. Required flying time, however, was 200 hours and there was no hp minimum. A medical examination by an Army flight surgeon and a personal interview with an authorized recruiting officer also were required.

It was recognized that 200 flying hours were a great deal to require but the idea was to bring the most experienced women into the program first and to help start the program as smoothly and quickly as possible. The pool of women with this amount of experience was rapidly drained, and quickly and successively the needed flying hours were reduced to 100 and finally to 35 hours, which minimum remained until the end of the program.

Where did these women come from? Literally, everywhere. One had first soloed in the 1920's in one of the old "Flying Jennys." One had been a professional parachute jumper. There was a former Hollywood stunt girl. There was one who had been a Powers model, another a movie starlet. Of course, there were a goodly number of schoolteachers and married women whose husbands also were serving somewhere in the world.

The first recruits converged on the Municipal Airport at Houston, Texas. In the absence of barracks, auction courts were taken over. The first flying equipment they saw was motley, obtained from surplus or obsolete

Colonel Jacqueline Cochran, Director of Woman Pilots, AAF, and Brigadier General Stearley, Commander of First Tactical Force, review WASP of the Target-towing Squadron at Camp Davis, North Carolina.



stocks at various airfields, with rarely two planes of the same type. Maintenance was a nightmare. Then, PT-19s, BT-13s, AT-6s and UC-78s Army Air Force (AAF) mainstays, were moved

The first class—the “guinea pigs” they called themselves—was 43-W-1. Of 30 enrollees, 26 were graduated on April 24, 1943, at Ellington Field, Texas. Major General Gerald C. Brant, Flying Training Command, annexed on the first WASP wings.

Good fortune smiled on the WASP early in 1943 when Flying Training Command agreed to turn over Avenger Field at Sweetwater, Texas, to the women. The first women's class to enter training at Avenger arrived February 21, 1943, and from then until termination of the program, it was home to the WASP.

The WASP found Sweetwater far from an ideal location. It was not an easy town to get to in central Texas. Most trainees came by train which meant views of miles and miles of mesquite bushes and flat stretches of wasteland. Avenger Field was three miles from the town, with transportation furnished by the “cattle wagon.” The lure of adventure, fun and patriotism more than compensated for the location.

Flying equipment at Avenger Field eventually came to consist of more than 200 airplanes of standard types, including PT-17s, PT-19s, BT-13s, BT-15s, AT-6s, AT-17s, UC-78s, UC-43s and UC-81s.

From the beginning, the training of women pilots covered military, ground school and flying phases. Military training included military customs and courtesies, Articles of War, safeguarding of military information, drill and ceremonies, Army orientation, organization, military correspondence, chemical warfare and personal affairs. Ground school included mathematics, physics, maps and charts, navigation, principles of flight, engines and propellers, weather, code, instrument flying, communications, and physical and first aid. Flight school covered primary through advanced training, and was designed to permit a graduate to take up operational duties in all lighter type aircraft immediately and to handle faster, heavier types after a short period of transitional training.

Originally, the total program spanned 23 weeks, allowing a minimum of 115 hours of flying and 180 hours of ground school. As women with less flying experience were admitted, the period was lengthened to 30 weeks, with 210 hours of flight and 393 hours of ground school. Originally, a three-phase program of primary,



WASPs receive ground instruction at Childress AAF, Texas, 12 October 1944. From left: Jean C. Parker, Dorothy I. Aspell, Dorothy M. Kielty, Mozelle I. Simpson, Marion G. Mann and Bobbye D. Crain.

basic and advanced was used. Later, a two-phase system of primary and advanced was adopted with good results. The two-phase system was so successful that it was approved for subsequent use in training male cadets. Generally speaking, women trainees received about the same training as aviation cadets.

In the initial stages of training, it was assumed that women would only fly lighter types of planes. But it became evident early that they could qualify on many types, including heavy bombers. After the first few weeks of training, in recognition of their potential, minimum height requirements were raised from 60 inches to 62½ inches and in the summer of 1944, after more extensive experience, to 64 inches. Whereas male pilots were required to be in the 18 to 26 age group, the WASP retained 35 as the upper age limit; however, few were taken over 26. On the other hand, the lower age limit for women pilot trainees was reduced from 21 to 18½ years in August 1943.

Of the 1,102 WASP who were assigned to operational duties in the life of the program, the percent in each age group was: 21 or under, 29%; 22 through 27, 57%; 28 through 32, 11%; over 32, 3%. As for height, 15 women were admitted who measured between 60 and 62½ inches; 10 were graduated, while five were eliminated for flying deficiency. The tallest trainee accepted was 72½ inches and she went on to become a successful pilot.

From the beginning of operations,

the bases (both Houston and Sweetwater) were handled by the same contractor, who paid rental to the Federal Defense Plant Corporation and took care of operation and maintenance of the plant and the flying equipment and the employment of both ground and flying instructors. Similar arrangements existed at most male cadet bases. The total cost per woman graduate was estimated to be \$12,000, including payment to contractor, salary and uniforms, depreciation and maintenance of equipment. It was generally agreed that the cost of training women was no greater, and probably smaller, than the cost of training men.

Women pilots were on Civil Service status, so their scale cannot be matched exactly with military pilots. Women trainees drew \$150 per month and with regulation overtime established by the Army Air Forces, actually received \$172.50 per month. Unlike the men, women trainees paid their own way to the training center and if they washed out, for any reason, paid their own way home. While at Sweetwater, women trainees paid the contractor \$1.65 a day for “maintenance.” As nearly as can be figured, a woman trainee was paid about the same as a male cadet; as a graduate she received slightly less than a second lieutenant on flight pay.

Uniforms were provided at a cost of \$177 compared with a \$250 allowance for second lieutenants. The first uniforms were makeshift, to say the least. Shortly after opening the Sweetwater center, word came

through that a general would visit. The instructors scanned the women and realized they just didn't look military. A hurry-up call went out to men's training bases nearby and a load of khakis was delivered. The women stayed up all night, hemming and stitching, and next morning—there they were, in formation in men's trousers, and neat white shirts. But the general never arrived. At last, though, the women had a uniform and use of it continued to the end of the program. The dress uniform was known forever after as the "general's pants."

Living quarters at Sweetwater were barracks, with six women to a bay. Five women, called at first "Establishment Officers" and later "Staff Advisers," were on hand to perform liaison between trainees and the military administration of Avenger Field. They were also available for counseling on personal problems and generally worked out solutions to the unprecedented problems arising from Civil Service women pilots trying to become part of the military organization.

The possibility of militarization and actual commissioning caused living conditions to be set up much like the aviation cadets. Whenever possible, the women trainees were treated as cadets and pilots. Squadron and section officers were selected from trainee population on a rotational basis.

With the first pains of organization behind them and the pioneering women in the cockpit for operational duty, the decision was made in July 1943 to merge the training and operating branches of the woman pilot program. A need existed for centralized assignment control, selection of flying duties and health and welfare aspects. On 5 August 1943, the women pilot trainees and the WAFS were merged into one organization known as WASP.

Miss Cochran was appointed Special Assistant to the Assistant Chief of Air Staff, Operations, Commitments and Requirements, with title of Director of Women Pilots. At about the same time, Mrs. Love, chief squadron leader of the WAFS, was named WASP executive on the staff of the Ferrying Division of Air Transport Command and served as advisor on WASP matters in that command.

The new status of the WASP permitted an organizational structure to be established, one that was effective, for the most part, but was continually hampered by the quasi-military, quasi-Civil Service status of the program from beginning to end.

WASP staff executives were named in each of the major commands in

which WASP flew: Ferrying Division of Air Transport Command, Training Command, Eastern, Central and Western Flying Training Command, and the Second Air Force.

The WASP overall program was under direct control of Army Air Forces Headquarters and administered through regular command channels. The actual administration of WASP operations had to conform to the pattern of decentralized administration and control in effect in the Army Air Forces. Trainees were under direct supervision of Air Training Command; graduate WASPs were under direct supervision of the air force or command to which they were assigned.

Now that the WASP was a fully established outfit, it was possible to devote attention to mission flying other than ferrying which had already proven successful. Towing of targets did not require able-bodied, combat-ready pilots, so 25 women pilots were sent to Camp Davis, Oklahoma, in July 1943 to take up the job. Later, at the same field, WASP pilots undertook searchlight and tracking missions. All were successful. It was then decided to try women pilots out in the B-17 Fortress and the B-26. In the bomber missions, they performed as capably as the male pilots and carried out operating missions with no serious accidents. Although no attempt was ever made to qualify women in four-motored equipment, when they did assume such duties, again their performance equalled the men's. In time, other missions such as simulated strafing, smoke laying and other chemical missions, radio control flying, basic and instrument instruction, engineering test flying, administrative and utility flying, were added to the ones women could do and they did them well.

Of 1,830 women who reported to Sweetwater for training, 552 or 30.7% of the total were eliminated during training for flying reasons. Of this same group, 1,074 or 58.7% were graduated. Eliminated for medical reasons were 27 or 1.4% and for disciplinary reasons, 14 or .8% while 152 or 8% resigned.

During the same period that the WASP program was in operation, the percentage of elimination among male flying cadets was 35.6% while WASP eliminations exclusive of voluntary resignations was 33%. Adding resignations, the percentage was a comparable 35.9.

The main reasons for voluntary resignations among women, in order of frequency were: fear of flying, loss of desire, loss of confidence, physical unfitness or changed situation at home

requiring presence of trainee.

Principal reasons for medical elimination were: emotional instability and hysteria, airsickness, pregnancy among married WASP, fear of flying, asthma, claustrophobia and fatigue.

Of the 1,074 WASP who were graduated and the 28 original WAFS, for a total of 1,102 there were still 916 in service when the program was inactivated. Of this total, 150 or 13.62% resigned; 9 or .81% were separated for disciplinary reasons; 27 or 2.45% were killed.

The high rate of resignation is directly attributable to the fact that WASP were not military members. Any WASP could resign at any time. Since there were no such alternatives as honorable or dishonorable discharge, some WASP were permitted to take the simpler administrative procedure of resignation. Severance for disciplinary action was always reviewed by the office of the Director of Women Pilots, and experienced Army Air Forces officers were consulted to assure the action being taken was consistent with that afforded male pilots.

Despite the fact that training was still underway and some women had been in operational duties for only a few weeks when the program was inactivated, WASP accomplishments were considerable. They paid their way by flying an aggregate of 64 million miles on operational flights and averaged 33 hours of flying per month in operational duties. The monthly average by commands was 41.5 hours in Training Command 28.2 hours in Air Transport; and 35 hours in First, Second, Third and Fourth Air Forces. Averages by type of service were: 36.2 hours target towing; 28.2 hours ferrying; and 44 hours operational and administrative. Ferry work was all daylight, but other types were around the clock.

During the life of the WASP program, there were 402 accidents, of which 35 or 9% were fatal. During the same period, Army Air Forces male pilots experienced an 11% fatal accident rate. Expressed in a different manner, the WASP total accident rate amounted to .060 per one thousand hours, or one fatal accident per 16 667 hours flown. For men, the fatal rate during 1943 and 1944 was .062 per one thousand hours.

In the training program, there were nine fatal accidents resulting in 11 fatalities to WASP personnel and three fatalities to instructors. This represented a fatal accident rate of .032 per one thousand hours and a fatal rate, including instructors, of .049 per one thousand hours of flying. This, too, corresponds closely to the rates

for male pilot trainees during the same period: .034 per one thousand hours fatal accident rate and .045 per one thousand hours fatality rate.

Aside from the training program, the fatal accident rates among graduates and WAFS was identical to the Army Air Forces male pilots domestic flying rates overall: for the women, 26 fatal accidents of one fatality per accident for a rate of both .088 fatal accident and fatality; for the men, .088 fatal accident but considerably higher for fatality rates, since their flight involved multiple death accidents.

The women who lost their lives in training were: Jane Champlin, Marjorie Davis, Marjorie D. Edwards, Elizabeth Erickson, Mary H. Howson, Kathryn B. Lawrence, Margaret S. Oldenburgh, Gleanna Roberts, Margaret J. Seip, Helen J. Severson and Betty P. Stine.

The women who lost their lives among the WAFS and graduates of the training program were: Susan P. Clarke, Katherine Dussag, Cornelia C. Fort (WAFS), Frances P. Grimes, Edith C. Keene, Mary P. Hartson, Hazel Y. Lee, Paula R. Loop, Alice E. Lovejoy, Lea O. McDonald, Peggy Martin, Virginia C. Moffat, Marie Michel, Beverly J. Moses, Dorothy M. Nichols, Jeanne Norbeck, Mabel V. Rawlinson, Bettie M. Scott, Dorothy F. Scott (WAFS), Marie E. Sharon, Evelyn G. Sharp (WAFS), Marian Toevs, Gertrude Tompkins, Mary E. Trebing, May L. Webster, Bonnie J. Welz and Betty L. T. Wood.

One of the WASP lost her life while riding as a passenger, but her name is included above because it was in line of duty. Three others lost their lives while serving as co-pilots with male pilots. Four of the 11 who were killed in training were accompanied by instructors at the time.

In 1944, the field at Sweetwater was under construction with approximately 25% of the runways out of service at all times. Landing and taxiing strips at night were lighted by oil pots. Oftentimes, landings had to be made in heavy crosswinds to avoid unusable runways. While these conditions contributed to minor and non-fatal accidents, no deaths directly resulted.

Miss Cochran felt that the original WAFS should have had the best fatality, accident and severance rates, for they were experienced pilots. Yet, when graduate pilots' statistics were compared with the original WAFS (who did not undergo AAF training), the WASP grads excelled. The figures were: WASP—.041 fatalities per one thousand hours and .533 accidents per one thousand hours; WAFS—.210 fa-

talities and .694 accidents respectively. Miss Cochran concluded the AAF flying program, regimentation and discipline had considerable value.

Prior to women's entry into the WAFS/WASP programs, there was no real medical research into their physical fitness for the rigors of flying. There was more concern for how regularly they would be available for duty. Yet, when the analysis was completed, it was found that the average loss per month was one-half day and that the women instructors at Sweetwater lost less time than the male instructors. Medical investigation of concentration, coordination, reaction and tenseness of women pilots showed that flying provided an emotional relief for women, which aviation medicine attributed to the "sedation of flying."

Miss Cochran concluded that not only can "women take it," but their strong motivation enabled them to equal and surpass the men's rates for time lost.

Tests of physical strength were inconclusive in view of the fact that few women flew the heavier planes and seldom was physical strength a factor. Other physical capabilities scrutinized closely were night vision, airsickness, respiratory ailments and anoxia. Women exhibited no deficiencies in any of these.

Various mental tests were applied to WASPs and, in general, they exceeded male averages largely because they came in with greater education. Women tended to excel in tests of reading comprehension, mathematics and other academic abilities. The women scored somewhat lower in tests to predict pilot aptitude and were decidedly lower in tests dealing with the understanding of mechanical principles and two-handed coordination.

It was summarized in the final overall medical report: "It is no longer a matter of speculation that graduate WASPs were adapted physically, mentally and psychologically to the type of flying assigned. Commanding officers were almost unanimous in reporting that their (WASP) deactivation was keenly felt. Surgeons stated that they stood up well to their job; that the male personnel lost more time to being grounded."

One area, medically, in which there was "no contest" was venereal disease; no case was discovered or reported among inductees, trainees or WASPs on operational duty.

One of the tragedies of the program was that the WASP were never militarized. The WASP were begun on a civilian basis to test the potentialities and gain experience before taking the big step. At the beginning, there was

no urgency for militarization. Then, it seemed they were overtaken by events. Although the training program was set up along military lines—the WASP were living at air force bases, dealing with air force equipment, eating in officers messes, associated with flying personnel—they were governed by civilian laws and regulations. They had no government insurance. In fact, it was difficult to work out hospitalization in event of sickness or accident. As stated earlier, the easy opportunity to resign at any time, with or without just cause, weakened control in discipline and welfare.

The prospect of militarization was always held up as a possibility. In May 1944, the Army Air Forces School of Applied Tactics offered a 30-day "Officers Training School" at Orlando, Florida. Many WASP attended this school in preparation for the "big step."

Early in 1944, militarization of the WASP was recommended by the Military Affairs Committee of the House of Representatives, but the bill failed to pass. The reasons were never quite clear except that there were a considerable number of male flying instructors on Civil Service rolls in a situation similar to the WASP, and equal treatment would have been impossible in view of projected cutbacks in civilian instruction. Shortly thereafter, the situation changed rapidly as the war turned in the allies' favor and available pilot material increased. The principal disadvantage to not being militarized was that the WASP were deactivated without any rights or veterans benefits, with no reserve status, no insurance for survivors, and even without the right to display a gold star in the window.

Even as the WASP were considering the establishment of a second training school, the war in Europe ended and returning male pilots available for domestic duty signalled the end of the WASP program. Adequate notice was provided not only to give the WASP time to adjust, but to allow those commands and air forces which were using WASP regularly and, in some instances, in preference to men, as for target towing and pursuit ferrying, to obtain male replacements. The order for inactivation was issued 3 October 1944, with inactivation to occur 20 December 1944.

The avalanche of letters of commendations and appreciation to WASP as a group and as individuals began to flow.

General Arnold said at the farewell ceremony:

"I am glad to be here today and talk with you young women who have been making aviation history. You

and all WASPs have been pioneers in a new field of wartime service, and I sincerely appreciate the splendid job you have done for the AAF. You and more than 900 of your sisters have shown that you can fly wingtip to wingtip with your brothers. If ever there was a doubt in anyone's mind that women can become skillful pilots, the WASP have dispelled that doubt

"Certainly we haven't been able to build an airplane that you can't handle. From AT-6s to B-29s, you have flown them around like veterans. One of the WASP has even test-flown our new jet plane.

"You have worked hard at your jobs. Commendations from the generals to whose commands you have been assigned are constantly coming across my desk. These commendations record how you have buckled down to the monotonous, the routine jobs which are not much desired by our hot-shot young men headed toward combat or just back from an overseas tour. In some of your jobs I think they like you better than men.

"I want to stress how valuable I believe this whole WASP program has been for the country . . . Every WASP who has contributed to the training and the operation of the Air Force has filled a vital and necessary place in the jigsaw pattern of victory. Some of you are discouraged; sometimes, all of us are, but be assured you have filled a necessary place in the overall picture of the Air Forces."

Brigadier General William H. Tunner, commanding the India-China Division of Air Transport Command, wrote from his APO address:

"The WASP of the Ferrying Division leave behind them a truly impressive and unprecedented record, one with which I am sincerely proud to have been associated. They have accomplished far more than the safe and efficient delivery of hundreds of vitally needed aircraft; they have proven beyond doubt that in time of national emergency America can give its women the most challenging assignments with complete confidence."

The commander of Headquarters Ferrying Division, Air Transport Command, Brigadier General Bob E. Nowland said:

"I am certain that when the complete history of the Air Force's accomplishments is written, the role played by you and your fellow WASPs will hold a prominent place."

The Commanding General of Air Transport Command, Major General Harold L. George, said:

"It is my desire to especially commend the Air Transport Command WASPs for their performance of the

difficult and dangerous mission which they so successfully have completed over the period of their assignment to Air Transport Command."

With this praise ringing in their ears, many members of the WASP thought it would be almost no time before the WASP or its equivalent was reestablished and made a permanent part of the military establishment. Two months later, some of them received a circular describing the possibility of entering the Women's Army Corps as rated flying officers. Unfortunately, the circular was a hoax, and Miss Cochran had to issue a statement saying it was not from official sources.

"No hope can be held out to former WASP of a return to military flying through the WAC or through any other civilian or militarized arrangement now visible," she said. Four years later, the picture changed; the news was announced in a letter on the pink embossed stationery of Jacqueline Cochran, Inc. It was dated 4 January 1949 and read:

Dear Ex-WASP:

At long last, the United States Air Force has agreed to offer to all Ex-WASP who meet the standards and qualifications a commission in the United States Air Force on a *non-flying* status or in the United States Air Force Reserve on a *non-flying* status. The rank of commission in the Reserve will be predicated on the length of service you had in the WASP, exclusive of training periods.

Air Force letter No. 35-103B, published by Department of the Air Force, November 17, 1948, made it official. It said, "Former members of the WASP may apply for appointment in the Air Force Reserve under the provisions of this letter. For the purposes of appointment only, service with the Women's Auxiliary (cq—should have been Airforces) Service Pilots, excepting periods of training, will be construed as commissioned service.

The offer was snatched up almost immediately by many former WASP, but through the first hitch, many found the peacetime pace and relegation to desk-type work just not up to the vivid memories of those colorful years between 1942 and 1944.

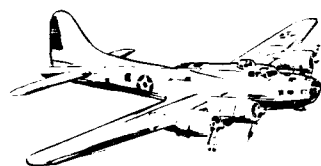
So today, 26 years later, there are now only eight former WASP on active duty with the WAF, as nearly as can be determined from the unofficial records of the Order of Fifinella—the organization which has attempted to keep WASP members in touch with one another.

One of the former WASP still on active duty is Lt. Col. Julia Ledbetter, who went into the Women's Army Corps (WAC). According to last reports, she is on recruiting duty in Newport News, Virginia. Of those now in the WAF, Maj. Marion R. Tibbets' last recorded address was Spangdahlem, Germany; Maj. Jeanette C. Kapus has the latest address of the Military Advisory Group, Peshawar, Pakistan; Lt. Col. Yvonne C. Pateman, assigned to the Pentagon, is on orders for Tan Son Nhut; Lt. Col. Mary Carolyn Clayton is at Vandenberg Air Base, California. Lt. Col. Ann R. Johnson is not only WAF Staff Director for all the Pacific Air Forces but Chief of Officers' Records for the Command at Hickam. Her address is: Director of Administration, Headquarters Seventh Air Force, Tan Son Nhut, Saigon, Vietnam. Also at Hickam and heading the Management Analysis Division of the Comptroller for Pacific Air Forces is Maj. Nina K. Morrison. At the Headquarters of the Commander in Chief, Pacific Command, is Lt. Col. Joan Omsted, who came to Hawaii from a year's tour at Tan Son Nhut Air Base, Republic of Vietnam; at Tachikawa, Japan, with Headquarters of the Fifth Air Force, is Maj. Doris Williams.

There may be others. If you know one, ask her to sign in with the Order of Fifinella, P.O. Box 2912, Fort Wayne, Indiana 46809.

Most on the list are regular officers, but with their wartime service with the WASP not counting toward military retirement, their service dates from whenever after January 1949 they accepted the offer to become a member of the regular military establishment. Thus, most are only now approaching 20 years' service.

Whatever the disadvantages of WASP service in terms of lack of benefits, its members were more than compensated by a solid feeling of accomplishment.



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Directorate
4/28/93

All School Bosses
Ensure all your
folks have this
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it before they
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** NARRATIVE MESSAGE **

>>> P R I O R I T Y

AGE 01 MLN = 28408
AN = 404-135012

OR = 23215Z APR 93

CTION = LBCC, HQAU] CG(1) CSA(1)
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SUBJECT: REMOVAL OF COMBAT AVIATION EXCLUSION

OR ALL COMMANDERS FROM GEN MCPEAK

THE FOLLOWING IS AN EXCERPT FROM MY REMARKS TODAY ANNOUNCING AN
IMPORTANT CHANGE IN POLICY:

QUOTE: "IN ACCORDANCE WITH THE DIRECTION OF SECRETARY ASPIN, I
M TODAY ANNOUNCING THAT, EFFECTIVE IMMEDIATELY, WOMEN PILOTS AND
AVIGATORS WILL BE ABLE TO COMPETE FOR, TRAIN FOR AND FLY ANY
IRCRAFT IN THE INVENTORY OF THE UNITED STATES AIR FORCE. THIS
CTION COMES AT A TIME IN THE HISTORY OF THE AIR FORCE WHEN WOMEN
AVE ALREADY ESTABLISHED AN IMPRESSIVE RECORD. TWENTY YEARS AGO,
OMEN MADE UP ONLY 2% OF OUR ACTIVE DUTY FORCE. FOR THE LAST FOUR
EARS, WOMEN HAVE MADE UP MORE THAN 20% OF ALL AIR FORCE ACCESSIONS.
ODAY, OVER 67,000 WOMEN CONSTITUTE 15% OF THE ACTIVE DUTY FORCE -- A
REATER PERCENTAGE THAN ANY OTHER SERVICE. MORE THAN 14% OF THE

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>>> P R I O R I T Y <<<

IN = 404-135012

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OFFICER FORCE -- AROUND 12,000 OFFICERS -- ARE WOMEN. WOMEN FIRST ENTERED PILOT TRAINING IN 1976, AND NAVIGATOR TRAINING TWO YEARS LATER. SINCE THEN, 629 WOMEN HAVE GRADUATED AS PILOTS AND 220 AS NAVIGATORS.

THESE, 295 WOMEN PILOTS AND 115 NAVIGATORS REMAIN ON ACTIVE DUTY TODAY, MANY IN CUTTING-EDGE, HIGHLY DEMANDING JOBS:

TWO ARE FLYING U-2S AT BEALE AFB

THREE ARE FLYING C-130 AIRDROP MISSIONS OVER BOSNIA

ANOTHER IS A C-17 TEST PILOT

LAST JANUARY, AN AIR FORCE OFFICER BECAME THE FIRST ACTIVE DUTY AMERICAN WOMAN IN SPACE, ABOARD THE SHUTTLE ENDEAVOR.

TWO OF OUR FEMALE AVIATORS HAVE BEEN SELECTED FOR PROMOTION TO FULL COLONEL, ONE OF THESE WAS COMMANDER OF A FLYING TRAINING SQUADRON.

AS A MATTER OF FACT, ACROSS-THE-BOARD, AIR FORCE WOMEN ARE BEING PROMOTED TO SENIOR OFFICER AND TOP ENLISTED RANKS AT HIGHER RATES THAN EVER. OVER THE PAST FIVE YEARS, PROMOTION RATES FOR WOMEN TO MAJOR, LIEUTENANT COLONEL AND COLONEL HAVE RISEN STEADILY, AND ARE HIGHER THAN THE PROMOTION RATES OF THEIR MALE COUNTERPARTS. THE AIR FORCE HAS ALSO LED THE WAY IN PROMOTING WOMEN TO FLAG RANK. STARTING WITH GENERAL HOLM IN 1971, WHO TWO YEARS LATER BECAME THE NATION'S

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FIRST WOMAN 2-STAR GENERAL), 16 AIR FORCE WOMEN HAVE WORN STARS. AND TODAY, WE HAVE TWO ACTIVE DUTY WOMEN GENERALS, ANOTHER SELECTEE, AND THREE MORE IN OUR RESERVE COMPONENTS.

THE AIR FORCE IS IN A CUSTOMARY POSITION -- OUT FRONT -- IN INTEGRATING WOMEN INTO THE ORGANIZATION AND CREATING AN ENVIRONMENT IN WHICH THEY CAN SUCCESSFULLY COMPETE. UNTIL TODAY, WE LED ALL SERVICES, WITH 94% OF OFFICER SKILLS OPEN TO WOMEN. THE 6% EXCLUSION AMOUNTED TO ABOUT 10,000 POSITIONS, MOSTLY IN COMBAT AIRCRAFT OR POSITIONS WHICH REQUIRED EXPERIENCE IN COMBAT AIRCRAFT. THAT COMBAT AIRCRAFT EXCLUSION IS NOW LIFTED. I WANT TO ENSURE THE AIR FORCE MAINTAINS ITS REPUTATION AS A PLACE WHERE TALENT AND ABILITY ARE RECOGNIZED AND VALUED ABOVE ALL OTHER CONSIDERATIONS. THEREFORE, I HAVE DIRECTED:

1. THAT THE AIR FORCE WILL TRANSITION TO GENDER-NEUTRAL PILOT TRAINING IMMEDIATELY.
2. THAT THE AIR FORCE WILL INSTITUTE A GENDER-NEUTRAL ASSIGNMENT

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SYSTEM IMMEDIATELY, TO INCLUDE COMBAT AIRCRAFT.

3. THAT WE SCREEN ALL FEMALE PILOTS TRAINED SINCE THE MERIT ASSIGNMENT SYSTEM WAS ESTABLISHED IN 1990 TO AFFORD THEM THE SAME ASSIGNMENT OPPORTUNITY TO FIGHTERS AND BOMBERS THAT

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THEIR MALE COUNTERPARTS ENJOYED AT THE TIME OF GRADUATION.

4. THAT WE SCREEN ALL FEMALE FLYING INSTRUCTORS TO DETERMINE THOSE WHO HAVE BEEN TOP PERFORMERS IN TRAINING COMMAND. WE WILL TARGET THIS GROUP FOR ASSIGNMENT TO FIGHTERS AND BOMBERS, USING THE SAME PROCEDURES WE EMPLOY FOR SIMILARLY QUALIFIED MALE INSTRUCTOR PILOTS.

AS A RESULT OF THESE ACTIONS, WE HAVE IDENTIFIED SEVERAL WOMEN WHO WILL SOON BEGIN TRAINING TO FLY COMBAT AIRCRAFT." UNQUOTE

THIS DECISION OPENS ALMOST ALL AIR FORCE CAREER FIELDS TO WOMEN. THERE MAY STILL BE A FEW EXCLUSIONS IN SKILLS SUCH AS PARARESCUE AND COMBAT CONTROLLER BECAUSE OF THE GROUND COMBAT RESTRICTIONS.

SINCE THEIR INCLUSION IN THE AIR FORCE, WOMEN HAVE SHOWN, BOTH INDIVIDUALLY AND COLLECTIVELY, THAT THEY HAVE THE PROFESSIONALISM, EDUCATION AND ABILITY TO SUCCEED IN EVER MORE DEMANDING AND DIVERSE FIELDS.

THE DCS PERSONNEL WILL ISSUE THE NECESSARY POLICY AND PROCEDURAL CHANGES. IN THE MEANTIME, ENSURE THAT EVERYONE UNDER OUR COMMAND UNDERSTANDS THAT, EFFECTIVE IMMEDIATELY, AIR FORCE PEOPLE WILL BE ASSIGNED TO ALL ELIGIBLE CAREER FIELDS ON A GENDER-NEUTRAL BASIS. I EXPECT ALL AIR FORCE PERSONNEL TO IMPLEMENT

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THIS POLICY PROMPTLY AND PROFESSIONALLY.

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FACSIMILE ELECTRO MAIL TRANSMITTAL

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SECTION I - TO BE COMPLETED BY ORIGINATOR

CLASSIFICATION		TRANSMISSION		PAGE ONE OF 4 PAGES	
OFFICE USE ONLY		<input type="checkbox"/> IMMEDIATE	<input type="checkbox"/> ROUTINE		
TO (Organization and Functional Address Symbol)				FAX NO.	
All AU Schools				DSN	COMMERCIAL
ATTENTION				VOICE NO.	
Commandants/Cmdrs				DSN	COMMERCIAL

SUBJECT			
McPeak MSG			
FROM (Organization and Functional Address Symbol)		FAX NO.	
AU/CC		DSN	COMMERCIAL
		VOICE NO.	
		DSN	COMMERCIAL

REMARKS	
Call CDA 3-2048 upon receipt!	
ASAP	

RELEASER'S SIGNATURE	DATE	TIME
<i>Bill Brown</i>	29 Apr 93	0830

SECTION II - TO BE COMPLETED BY ELECTRO MAIL OPERATOR

DATE TRANSMITTED	TIME TRANSMITTED	TRANSMITTER'S SIGNATURE
DATE ADDRESSEE CONTACTED	TIME ADDRESSEE CONTACTED	CONTACTOR'S SIGNATURE

The war was approaching and women patriots wanted to fly for their country, if only as . . .

Standby Warriors

by Capt. Rita Victoria DeArmond
Air Force Office of History

No matter how she figured it, the answer was always the same.

In May 1940, Nancy Harkness Love wrote to the Army Air Corps and proposed a solution to the anticipated pilot shortages should America be drawn into World War II. Her calculations pointed to a practical solution, albeit one certain to startle the Army Air Corps: Recruit women who already knew how to fly.

Nancy Love had earned her private pilot's license as a teen and had qualified for her commercial license in 1933.

Her credentials were impressive. She helped develop the tricycle landing gear while working with the Bureau of Air Commerce and had tested and demonstrated the Gwinn aircar and Hammond "safety plane."

"I've been able to find 49 [women pilots] I can rate as excellent material," Love wrote in her proposal. "There are probably at least 15 more . . . most of them have in the neighborhood of 1,000 hours or more—mostly more—and have flown a great many types of ships."

Love's letter reached Lt. Col. Robert Olds, a plans officer for the chief of the Army Air Corps. Colonel Olds agreed with Love that women could co-pilot transport aircraft or deliver single-engine aircraft from factories. He suggested that women pilots recruited by Love be commissioned as second lieutenants, receive refresher training, and be used for transport and ferrying duties.

Colonel Olds proposed the plan to Maj. Gen. Henry H. "Hap" Arnold, Army Air Corps chief. The general rejected the idea, believing there were sufficient male pilots among the

reserve and commercial ranks to fill the potential void. Arnold also felt women pilots could better serve the country by taking over jobs in commercial aviation. That, in turn, would free male commercial pilots for the rigors of military flying.

But Love persisted. She predicted the Ferrying Division would need additional pilots to keep pace with the increase in airplane production at American factories.

And Love was right.

In June 1942, the determined aviatrix again wrote Army Air Corps headquarters suggesting women pilots be recruited to pilot the short-handed Ferrying Division. She emphasized that women pilots could

assume ferrying duties quickly and hoped their performance would prove the practicality of women pilots in uniform.

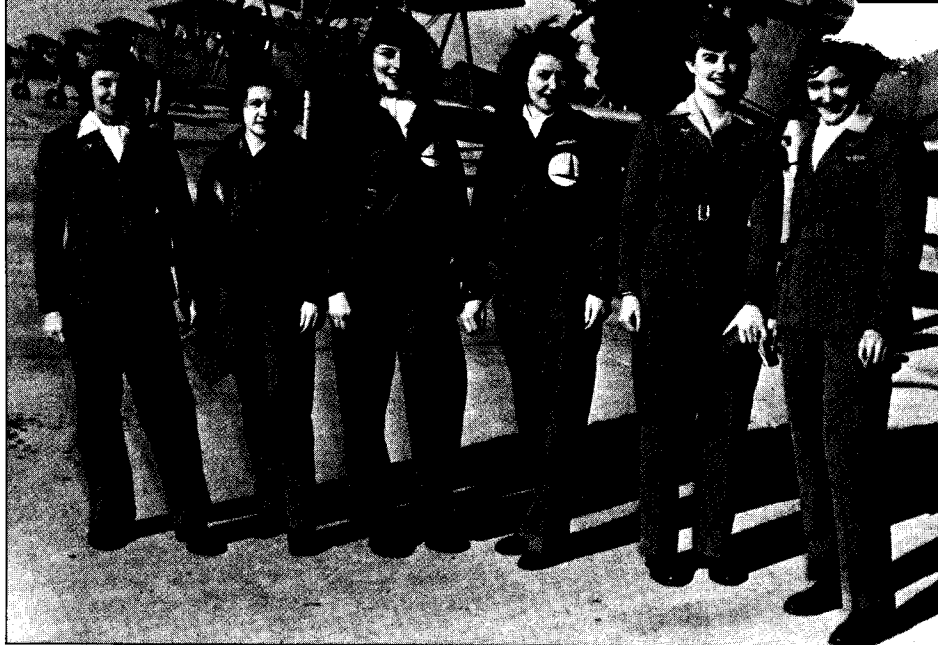
Maj. Gen. Harold L. George, commander of the Ferrying Command, gave a thumbs-up to the idea. In a memo to General Arnold, he argued for the chance to hire highly experienced women pilots—but on an experimental basis. He stressed the test would serve to determine "the suitability of utilizing women pilots in the delivery of military aircraft."

Bob Leairt, American Magazine



Nancy Harkness Love in 1942. She proposed using women pilots to alleviate a pilot shortage should the United States have to enter World War II.

photos courtesy of Teresa James



CLOCKWISE FROM LEFT: Sis Finé (far left), Nancy Batson, and Jane Straughan in front of WAFS alert room. Teresa James preparing for a flight check in a PT-19 aircraft. Kathryn Rawls (far left), Phyllis Burchfield, Nancy Batson, Delphine Bohn, Florence Miller, and Teresa James at Sheppard Field, Wichita Falls, Texas, 1942. Women pilots ferried trainers and pursuit, cargo, attack, and bomber aircraft during the war.

General George reasoned that 50 women pilots would provide an adequate basis on which to judge the women's overall flying potential, and that he would not need to hire more until the capabilities of the experimental group were thoroughly tested. No one knew if the women had the necessary stamina to handle the job. And no one was sure of the job's physiological effects on women.

On that basis, General Arnold gave the go-ahead. He had been named commanding general of the Army Air Forces on March 9, 1942. Although it was never an official designation, the Women's Auxiliary Ferrying Squadron was born. Individual pilots were identified as WAFS pilots, or WAFs.

Only women with extensive flying experience were selected. Each applicant was required to possess the same qualifications as male civilian pilots—and then some. All pilots had

to be between 21 and 35, possess a high-school diploma, and have a commercial pilot's license with a 200-horsepower rating. Additionally, the women needed at least 500 hours of certified flying time, including cross-country flying experience, and a letter of recommendation from a previous employer or a prominent member of her community. Interested applicants were encouraged to apply by letter or in person.

If their records proved suitable, women were invited—at their own expense—to Wilmington, Del., for an interview and flight check in an Army trainer. Given by a qualified military instructor pilot, the check ride included general flying techniques such as takeoffs, landings, stalls, spins, and chandelles—a maneuver in which the plane turns as it climbs, gaining speed in the process.

Applicants passing their check flights met a board of three officers

who reviewed their credentials and flying abilities. No woman who required specialized flight training could be accepted. The last hurdle in the application process involved passing a flight physical.

Since no exception to any of these qualifications was allowed, only a few women could meet the rigid requirements.

Those who were accepted underwent an intense four to six weeks of instruction. Ground school was conducted in the morning, and flight instruction took up the afternoon session. The women were taught standard operating procedures for military aircraft, military organization and procedures, forms preparation (to complete ferrying paper work), ferry routes, data from the Pilots Information File, and tech orders for the types of aircraft they would be delivering.

Women who successfully completed the course were hired on a three-



CLOCKWISE FROM RIGHT: Dorothy Fulton (far left), Sis Bernheim, Helen McGilvery, Nancy Batson, and Gertrude Meserve at Niagara Falls, 1943. Betty Gillies (far left), Nancy Batson, Esther Nelson, Helen Mary Clark, Teresa James, and Evelyn Sharp with Capt. Onas Matz at Hagerstown, Md. Teresa James (front row, left) and Betty Gillies; Barbara Towne (standing, left), Helen Richards, and Barbara Erickson are ready for ferrying duties.



month conditional status. If they continued to be of service, their tours were extended another 90 days.

The woman selected as director of women pilots during the hiring and schooling phase would also supervise the billeting arrangements and sit on the selection committee. She had to be a qualified commercial pilot with at least 1,200 flying hours and 12 years' flying experience. She also needed to have prior experience working for the Air Transport Command. Since Nancy Harkness Love had been mapping out ferry routes for the Ferrying Command, she was the perfect candidate.

General Arnold finally conceded to the need for women pilots. On Sept. 5, 1942, more than two years after Love's initial proposal, he directed the immediate hiring of women pilots. That same day, Love received word to send telegrams to those women whose qualifications met the required standards.

Since existing legislation did not authorize women flying officers or flight pay for them, commissioning of the new women pilots was temporarily postponed. But their privileges remained virtually the same as the men, including use of the officers mess.

Like the men, women stood formation and roll call at 8 a.m. and lived in bachelor officer quarters during school. They were subject to discipline and discharged in exactly the same manner as male civilian pilots. Only two major differences were evident: women earned \$3,000 a year—\$500 less than male civilian pilots—and they were not permitted to fly overseas.

Following their initial training, the women pilots were assigned to the 2nd Ferrying Group at Wilmington, Del. A review of their backgrounds reads like a "Who's Who Among Women Fliers."

The first 13 women assigned had logged between 532 and 2,627 flying hours; the average flying time of the original 25-woman squadron was 1,162 hours. Five owned planes and had criss-crossed the nation at the controls. One had flown extensively in England and France before the war. All had been flight instructors, and five were primarily flight instructors for two to three years prior to joining.

Before long, the American public was confused as well as fascinated by this new phenomenon of the woman pilot in uniform. On one occasion, a woman confronted two WAFs in uniform, saying, "That's the first time I've ever seen a uniform of the Mexican Army. How do you like it here?" Without hesitation, one of them replied, "*No comprendo* [I don't understand]," and walked away.

As public interest grew, so did press coverage. Typical of the inci-



dents reported was that of the women pilots who landed at Winder, Ga. Although the field had a radio station for weather reports, there were no refueling facilities. The resourceful women hitched a ride to town where they convinced a local dealer to deliver the needed gas.

Throughout the remainder of 1942, women ferried only PT-19A primary trainers and L4-B liaison planes. But they were soon needed to fly P-40 and P-47 high-performance pursuit aircraft; they also piloted larger C-47, A-36, and B-25 aircraft.

Trips of more than 2,500 miles—considered long-distance flying four decades ago—were not unusual. Military doctors, who had expected an onslaught of complaints from women grumbling about flying fatigue, found the frequency of such complaints higher among male pilots. Detailed medical data developed by flight surgeons served to validate the physiological and psychological suitability of women for piloting military aircraft.

By April 1943, the women's ferrying group was divided and reassigned to three additional bases, all located near aircraft production facilities. Each had women squadron leaders, with Love as senior squadron leader. Otherwise, there were few administrative or organizational differences between

ABOVE: Pilot Betty Gillies in the cockpit in 1942.

RIGHT: Ms. Gillies (left) and Nancy Love in front of a B-17, the Queen Bee.



**No one knew
if the women had
the necessary stamina
to handle the job.
And no one was sure
of the job's physiological
effects on women.**

the women and their male counterparts.

Since his hesitancy in 1942 to recruit women pilots, General Arnold had radically altered his position on the use of women in the cockpit. He now directed women to perform practically all types of non-combat flying jobs in the continental United States. That meant greater numbers of women had to be recruited. Women pilots were no longer regarded or treated as a curious media spectacle—by the public or the military. Their exceptional job performance ensured that women pilots in uniform was a concept that could no longer be taken lightly.

Eventually, General Arnold became a staunch believer in the use of women to pilot military aircraft. In order to increase the women's numbers, he established a recruiting

and training program to teach women who had little or no previous aviation experience how to fly. And he selected Jacqueline Cochran—a world-class flier who went on to be the first woman to break the sound barrier—to inaugurate the Women's Flying Training Detachment at Houston's commercial airport and at a base near Sweetwater, Texas.

In July 1943, at General Arnold's direction, the WAFs and the flying training detachment merged. The WAFs continued flying for the Army Air Forces, within this new larger women's organization, the WASP—Women Airforce Service Pilots.

When Sally Ride became the first American woman in space 40 years later, she wasn't blazing a new trail, merely following the flight path of the WAFs.

[Editor's note: Capt. Rita Victoria DeArmond is assigned to the Office of Air Force History. She is writing a history of women in the Air Force and is the author of articles and reviews on subjects dealing with women.]