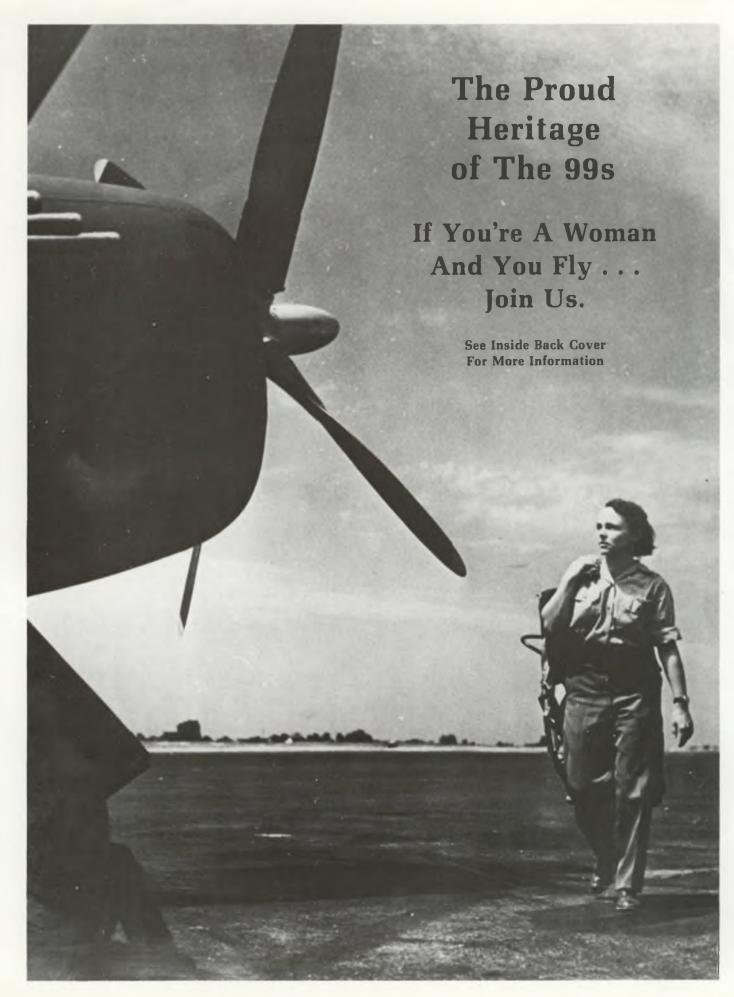


Special Issue 1978







THE NINETY-NINES, INC.

Volume 5

Number 8

Special Issue 1978

International Headquarters
Terminal Drive and Amelia Earhart Lane
P.O. Box 59965
Will Rogers World Airport
Oklahoma City, Oklahoma 73159
Return form 3579 to above address
2nd Class Postage paid at Oklahoma City, Oklahoma
and at additional mailing offices
under 2nd class publication #390740.

Publisher	The Ninety-Nines, Inc.
Editor M	larilyn Ratzlaff (405) 682-4425
Circulation Manager	Loretta Gragg
Headquarters Secretary	Virginia Oualine
Contributing Editors	Sylvia Paoli, Joan Kerwin
Editorial Assistants	lema Masonhall, Nancy Smith
Advertising Manager M	larilyn Ratzlaff (405) 682-4425

Articles and Features

Ninety-Nines International Headquarters4	
AE Scholarships5	
NIFA6	
The Women With Silver Wings8	
Air Age Education14	
Flying Companion Seminar	
Ninety-Nine Profiles	
Airmarking22	
Air Racing24	
Call to the Colors	

Advertisers

Beech														۰														. 7	,
Sporty	'S									۰		,			0		۰										. 4	23	}
USAIC	ì			۰			۰		۰						۰	۰	4	F	0	u	ır	t	h	(C	0	V	eı	r

INTERNATIONAL OFFICERS

President — Thon Griffith, 314 Robinhood Ln., Costa Mesa, CA 92627 Vice President — Janet Green, Rt. 7, Box 293W, Ocean Springs, MS 39564 Secretary — Gene Nora Jessen, 2814 Cassia, Boise, 1D 83705 Treasurer — Hazel H. Jones, 8536 Mediterranean, Dallas, TX 75238

BOARD OF DIRECTORS

Charlene Falkenberg, 618 S. Washington St., Hobart, IN 46342 Ruth S. Dobrescu, 4 Norman Court, Glen Cove, NY 11542 Esme Williams, P.O. Box 3283, Tequesta, FL 33458 Barbara Goetz, 8041 Ravina Court, Fair Oaks, CA 95628 Lois Feigenbaum, 26 Pinewood Dr., Carbondale, IL 62901

HEADQUARTERS HOSTESS

Nancy Smith, 7528 N.W. 11th, Oklahoma City, OK 73127 (405) 787-7923

Published ten times yearly, Jan-Feb and July-Aug issues combined.

Annual subscription rate is \$7.00 and is included as part of the annual membership of The Ninety-Nines, Inc.

Additional subscriptions: \$7.00 per year.

Membership Count 4,902 as of August 17, 1978

Postmaster: Please send form 3579 to The Ninety-Nines, Inc., P.O. Box 59965, Will Rogers World Airport, Oklahoma City, Okla. 73159.

What is a 99?

Thanks for taking one of our special issues of the 99 NEWS. One of the first questions usually asked is, 'What is a Ninety-Nine?' The next question is 'What do Ninety-Nines do?' It is our hope that this magazine will answer these questions and more. We also hope you will find something of interest to you personally and cause you to want to join the Ninety-Nines and participate in our many activities. What is a Ninety-Nine? She is a woman who is a licensed pilot. She also could be a doctor, lawyer, school teacher, air traffic controller, CPA, missionary, nurse, secretary, corporate executive, housewife, flight instructor, mother, fixed base operator, grandmother, judge, politician—almost anything else. The areas of interest represented by Ninety-Nines is as wide as the world and as tall as the sky. A Ninety-Nine can be, and generally is, almost any discipline you can name, and shares with all others a common bond—the love of flying.

The Ninety-Nines were founded in 1929. A letter was sent to all licensed women pilots to invite them to join an organization that would provide a closer relationship among women pilots and that would be helpful to them and to the aviation industry. Of the 117 invited, ninety-nine responded, hence the name. Since 1929, we have grown to well over 5,000 members in more than 30 countries and our activities continue to reflect the original purposes set forth by the charter members.

What do Ninety-Nines do? Here again, this is a complex question because they do just about everything. They fly for fun and the fly for business. They work with college students through the National Intercollegiate Flying Association and they have published a coloring book for the lower and middle school youth. They restore old airplanes and they are involved in the space program. They served in all areas of military aviation during World Wars I and II, except combat, and they are serving their country in all branches of the military today. They work with their local, state and national government as volunteers and as paid staff. They sponsor aviation safety seminars for the pilot and air age education for the public. They airmark airports for the pilot and they beautify airports for the public. Many chapters now are conducting classes for non-pilots to introduce them to the wonders of aviation. The Ninety-Nines devote much time and talent to emergency missions, whether it be searching for a lost aircraft, or transporting blood, or rushing the ill to the hospital. They have donated their time and airplanes to transport tons of pharmaceutical and medical supplies to needy hospitals abroad and they fly medical teams to isolated areas where their help is needed. Lest you think they are professional do-gooders, they are not. They are interested in aviation and aviation-related activities and are willing to help wherever they are needed. They also take time to enjoy the companionship and camaraderie that the organization affords. So, as we said, they do just about everything.

Now you have an idea of what a Ninety-Nine is and what they do. Please read our NEWS and get more detailed information about who we are and what we do. If you feel you have something to give to this organization or possibly are missing out on knowing a great bunch of women pilots who share your love of flying, get in touch with us. Please contact our International Headquarters in Oklahoma City and tell us where you live and where we can find you. We will contact a Ninety-Nine in your area and after you get together, you can decide whether you would like to be a Ninety-Nine. We hope you do decide to join. In any event, let us hear from you.

The International Board of Directors The Ninety-Nines, Inc., Thon Griffith, President

ON THE COVER

The Ninety-Nines Compass Rose was painted on the Shreveport, Louisiana, Downtown Airport by members of the Shreveport Chapter.

The Ninety-Nines International Headquarters

The beautiful Ninety-Nines Headquarters building, long a dream of members the world over, was dedicated November 2, 1975 on the 46th anniversary of the organization's founding. From humble beginnings in some officer's briefcase, the Headquarters had through the years progressed to Betty Gillies' home, and later, to a cubicle in the terminal building at Will Rogers World Airport in Oklahoma City.

The new facility, located on Will Rogers World Airport grounds, contains 5,000 square feet of modern, attractive and functional space. The exterior walls are rock-impregnated masonry with bronze floor-to-ceiling windows on three sides. The double entry doors, centered on the south side of the building, have the beautiful Ninety-Nines insignia for door handles. Flying on 30 foot flag poles, the U.S. and Ninety-Nines flags flank the concrete semicircle terrace extending across the front of the building.

Inside, a large reception/display area is flanked on one end by a library/conference area and on the other by a workshop/kitchen area. The display area offers visitors a glimpse of the Ninety-Nines' glorious past including many personal articles belonging to Amelia Earhart. It is hoped that the library and scrapbook areas, in addition to the collections of materials on Ninety-Nines members and other women pilots may one day grow to become an important resource center on women in aviation.

The furninshings in the Headquarters building have been donated by various chapters around the world. As they are received, monetary donations from chapters, individuals and industry are applied to the purchase of additional display cases, books for the library and other items to make the building more beautiful as well as more functional to both membership and the general public.

We invite you to visit our Headquarters whenever you're in the Oklahoma City area. Regular business hours are from 8:30 to 5:00. Our Headquarters Hostess, Nancy Smith will be happy to make special arrangements for you to go through our facilities at special times if the regular hours are not convenient.



The Ninety-Nine Headquarters building is located on the Will Rogers World Airport grounds in Oklahoma City



The conference/library area is a beautifully serene and quiet area, which has proved to be extremely functional as well.



Display cases feature memorabilia from aviation pioneers such as Amelia Earhart and Jimmie Kolp.



The lounge area is located in the conference/library section of the building.

The Amelia Earhart Scholarship

By Dr. Dora Strother

Women pilots helping women pilots, this is the story of the scholarship program of the Ninety-Nines, Inc. Initiated in 1940, the program honors the memory of Amelia Earhart, first president of the organization and one of the most famous of all women pilots.

Amelia knew the joy as well as the responsibilities of flying. But she also sensed the great future of aviation. She trained herself both academically and by practice to be a truly professional pilot. The scholarships and grants given in her memory aim at this same high goal.

The Ninety-Nines, Inc. awards fall into two groups. The first, and initial award, is for a career scholarship. When the fund was established there were few women pilots. They knew the difficulties and expenses involved as women tried to enter a profession dominated by men. They chose to give an annual cash scholarship award to women pilots who wished to increase their professionalism in aviation skills but needed a financial boost.

To do this an Amelia Earhart Memorial Scholarship Fund was established. At the International Convention of the Ninety-Nines, Inc. in 1941, under the Presidency of Betty Gillies, the resolution legally establishing the trust was adopted. A Board of Trustees was set up to govern the trust and select the awardees. This board is composed of five members of the Ninety-Nines, Inc.; two appointed by the Executive Committee of the Ninety-Nines, Inc. to serve permanently, and three elected for three-year terms by the membership. All serve voluntarily, donating their time and treasure to perpetuate the program and govern its growth.

The first scholarship award of \$150.00 was made in 1941. The total award was intended to come from the accrued interest of investments purchased with donations to the fund. At that time, this amounted to \$21.37. Generous Ninety-Nines donated to make up the difference for a single award that year as well as in the following year. (No awards were given during the war years of 1943, 1944, and 1945). Since that time the award monies for each year have come from the interest on invested capital plus one-half of all donations received that year. The other half is put directly into the fund.

Awards come from the chapters of the Ninety-Nines, Inc., from friends, and in the form of memorials.

Today the fund has almost reached \$100,000.00. This allows The Ninety-Nines, Inc. to increase the number and size of the scholarships. In 1978 eight scholarships were given, each approximately \$1,000.00.

These career scholarships have helped women earn many advanced flight ratings as well as academic degrees in aviation subjects. One scholarship recipient, Ms. E.V. "Susie" Sewell, received her scholarship in 1947. With it she was to complete her commercial pilot license and obtain a flight instructor rating. Her award was for \$150.00. Since then she has continued improving her skills as a pilot and has developed managerial and administrative skills. She has advanced in her field and today serves as President of Aviation Development Company of Oklahoma City. She rose also to be President of the Ninety-Nines, Inc., 1972-1974, and now serves on the Board of Trustees of the Amelia Earhart Memorial Scholarship Fund. She personifies the intent of the scholarship. As a successful executive in aviation and a woman pilot who was helped, she now reaches out to help others to find their own careers and success in aviation.

A second program sponsored by the trust is called The Amelia Earhart Research Scholar program. The intent of it is to provide a research grant for an established scholar to do research to increase the world's knowledge on women in aviation and aerospace. This research could be in any applicable discipline: medicine, physiology, history, nutrition, psychology, anthropometry and many more. This is considered an important and timely program since very few studies are available in the libraries and the literature applied to women and their capabilities in aviation and in space flight. The first award for an Amelia Earhart Research Scholar was made in 1978.

Both the career scholarship program and the research scholar program are truly living memorials to a gallant woman, a prestigious aviator. They will continue her spirit of professionalism among women in aviation. They will help other women to prove that women make excellent and responsible pilots and that the machine, be it an airplane or a spacecraft, does not know the sex of the person at the control.

1978 Scholarship Winners



Lana Basler



Joanruth Baumann



Linda Hollowell



Dorothy Niekamp



Rita Reo



Evelyn Snow



Verene Trubey



Rene Wicks

Special Issue 1978

The National Intercollegiate Flying Association

By Page Shamburger

NIFA—what does that stand for? National Intercollegiate Flying Association, that's what. What it stands for in the Ninety-Nines is a most tenacious, dedicated—yes—objective lure for many members. What members of the Ninety-Nines have done with NIFA ranges from driving cars, registering, lending clothes, judging, advising, to financial support.

What NIFA has done for Ninety-Nines is mainly giving the opportunity to have an active, definite part in the future of aviation. You have to be a part of the scene to understand. The appreciation of the college flyers, both male and female, almost is embarrasing. Somehow, once you are a part of the NIFA—Ninety-Nines group, you feel as if you should thank the college flyers!

NIFA has been a major part of college flying since the late 20's. It started, would you believe, as a college competition between gliders. It has grown up through the upheavals of war, of the necessity of finding financial support, of basically aviation's development from a brawling infant to an alive-and-well industry. Perhaps one of the most difficult fences to jump is the disbelief in college and university powers-that-be that flying competitions are important, are as important as say basketball.

That latter problem is still major. But the sparkplugs behind NIFA-people that have worked with it body-and-soul for years - are always helping. People like Prof. Harold Wood of Parks College, Hoyt Walkup of Oklahoma State, men and women of FAA. of the aviation industry—they number in the dozens. But likely the most help has come and will continue to come from the college kids themselves-as they grow into the industry with the help they got when they were trying to start. Look at it, an astronaut. the honcho of NASA, of AOPA, the first female Navy pilot, one of the first female airline pilots, boss-man of an advertising agency specializing in aviation accounts, FAA employees, corporate pilots, winners of air races, writers—and more—claim the chances to fly in college made it all possible.

The chance to fly. That's what it's all about. The Ninety-Nines are not too old to remember how hard it was to get the bucks together for renting planes, for a few gas dollars, or even for registrations at competitions.

Probably the Ninety-Nine who first backed NIFA was Arlene Davis. She was one of the better women pilots who, without much publicity, did it all. She started, in 1950, the support of the females in NIFA and her chapter, the All-Ohio Chapter, has

continued the support via a large trophy and work ever since.

For the past nine years, Ninety-Nine support of NIFA has multiplied. It would be a mistake to try to name all the Ninety-Nines who, over the years, have worked and worked hard for NIFA. By now, they likely number half-a-hundred. Many work with their regions quietly. Some teach aerospace to college kids and work with the competitions as non-paid advisors. Like Fran Sargent of Florida's Goldcoast Chapter. Gene Nora Jessen was a NIFA member and then pushed the idea with Beech.

But, it is a mistake to name them! How, financially, does the International Organization of the Ninety-Nines help? They donate—this year, \$700 to the NIFA Foundation. Chapters and sections have donated to NIFA and now, as individuals, Ninety-Nines are joining NIFA as Associate Members. That "contribution" is \$10 per year. Associates get the NIFA newsletter but mostly they know they have helped the future of aviation.

Some industries and some publications and some organizations like the Ninety-Nines give trophies, time and money. Some also give support. Thankfully, our Ninety-Nines do all of them. It's a most rewarding return to run across a 25-year old you remember, and they remember, from a NIFA meet—to see them well on their way up, and to hear, again, "Thanks for the help when I needed it."



The navigation pilot supervises the fueling of his airplane while the check pilot looks on. Each part of the competition is closely watched for accuracy.



Spot landings are an important part of NIFA competition.



Judges spread out along five-yard lines marked on the runway edge to make sure that someone has a direct view of the touchdown



Nancy Smith believes the target is the safest place to be during a message drop. This is another event based on flying accuracy and knowledge of the wind currents.

The decision to put your company into a high-performance jetprop like the Beechcraft Super King Air is more than just a wise allocation of capital. It's a solid corporate commitment: increasing the productivity of your management team and, hence, the profitability of your business. This fast, dependable travel machine can carry your key personnel direct to any destination, anytime they're ready to go. At speeds of up to 333 mph. Yet, on a typical business mission of 300 to 500 miles, it uses 121/2% less fuel than even the most fuel-efficient jets. No wonder it stands unrivaled as the best-selling corporate jetprop in the world. The Beechcraft Super King Air. An immensely rewarding investment.

This could just be your year for the commanding, comfortable eechcraft Super King Air.



Tell them about the General Aviation Manufacturers Association Take Off Sweepstakes. They could win a \$50,000 airplane just for earning their private pilot license. Have them call TOLL FREE, 24 hours a day, any day and ask for the BEECH "TAKEOFF" operator: USA 800-447-4700 (in Illinois, 800-322-

4400); Canada 800-261-6362 (Toronto, 445-

Make us prove it. Send for our free "Case for a New Beechcraft." It's packed with valuable information to help you determine the remarkably low net capital cost of acquiring a Beechcraft Super King Air.

Just write on your letterhead: Beech Aircraft Corporation, Department J-13. Wichita, Kansas 67201. And please tell us if you're already a pilot, an aircraft owner, and the type of aircraft you fly.

Know any friends who want to learn to fly?



The Women With Silver Wings

This is Part One of a condensed version of Mardo Crane's book "Women With Silver Wings." Part Two will be published in a future issue of the 99 NEWS.

By Mardo Crane

The first woman to fly for the United States Air Force was a beautiful, talented and very dedicated young lady named Nancy Harkness Love. Officially, she started the World War II Auxiliary Ferry Service (WAFS) on September 6, 1942. The Air Transport Command was part of the Airforce (as it was then spelled), and under their set-up was able to hire civilian help in the tremendous task of picking up aircraft from factories, and ferrying them to U.S. Air Bases, or designated spots for overseas transport. Nancy Love was more than qualified to handle the job of organizing and commanding the twenty-five "original" WAFS accepted for these ferrying missions.

Her husband, Colonel Robert Love, was a member of the Ferry Command's Chief of Staff, and very soon Nancy became an important cog in the Operations Office in Wilmington, Delaware, ferry headquarters. She had learned to fly at the age of sixteen, when her father, an M.D. cautioned her to do it well or not do it at all. The 1,500 hours she then amassed in the air was all in planes of 200 horsepower, so she was well prepared for the basic army aircraft. Commuting daily in the Fairchild 24 she owned with her husband, from Washington, D.C. to her job in the control office at the Martin Plant in Baltimore, gave her still more time, plus a definite insight into all military procedures necessary to complete a successful plane delivery. She had only to convince the "brass" that there were other women, as well, who would qualify as "ferry pilots".

In the fall of 1940, Nancy Love had proposed to General Robert Olds, then Commanding General of the Ferrying Division, that since the men were going to be needed to ferry planes to embattled England, the 235-some women then licensed pilots could be used for domestic ferrying. She reasoned that they could be hired as civilians and paid by civil service. After a check-out in Airforce planes they would be ready for duty.



Nancy Harkness Love, first woman to fly for the Airforce in 1952; founder of the "Original" Women's Auxiliary Ferry Service; Commander of the WAFS during WW II.

A definite answer from General Olds didn't come before there was an upheaval in the chains of command in the Airforce resulting in his transfer to another duty. In the new organization the Airforce and the Air Transport Command, now definitely under General Arnold, saw General Harold George given the job as Commanding General of the ATC, while C.R. Smith, of American Airlines, moved in as Chief of Staff to run the whole show.

Despite the fact that General Olds had been favorable toward Nancy's idea of using women pilots, he was so bogged down with the business of building a world or global structure of air transport and facilities, that he never actually said "Yes" to her proposal. Undaunted, Nancy approached General George, presenting her basic idea-to integrate experienced women pilots into the Ferrying Division. These women would be in Squadrons which would be directly under the Base Commander. There would be no difference between the way the women and the male pilots got their orders. Transfers would be directed through the Ferrying Division of the Air Transport Command, so that FDATC could station the women where they were most needed. Nancy did not wish to "take over", or "disrupt" the present system of using men, or in any way cause "waves". It was her conviction that qualified women pilots at that time able to fly at least a 200 horsepower aircraft, and who had a minimum of 500 hours of flying time, would be of great "help" in the war effort—the key word in her thinking. Coupled with this was also the reality of which she was very much aware, that it would be necessary to go ahead and quietly "prove" themselves, since many among the "brass" and the ranks of the Airforce viewed the proposition of women actually flying for the military as an appalling idea, akin to disaster.

But General George agreed to give Nancy's "Originals" a chance, and gave her the official go-ahead. It was an exciting triumph, and she was already prepared to activate her plan.

The Civil Aeronautics Association (C.A.A.) maintained a list of pilots who had licenses, although they were not separated according to sex. Nancy culled through the names, and on September 6, 1942, sent out a

telegram to each of two hundred women pilots. With this telegram the first corps of women to fly for the Airforce was inaugurated. It read:

Ferrying Division Air Transport Command is establishing a group of women pilots for domestic ferrying. Necessary qualifications are high school education, age between twenty-one and thirty-five, commercial license, five hundred hours, two hundred horsepower rating. Advise Commanding Officer Second Ferrying Division Air Transport Command New Castle County Airport Wilmington, Delaware if you are immediately available and can report at once at Wilmington at your own expense. Recommend proof of education and flying time.

The telegram was signed by Colonel Robert H. Baker, CO, 2nd Ferrying Group, New Castle Army Air Base, Wilmington, Delaware, for George Arnold, Commanding General Army Air Forces, Washington.

First to report and qualify was Betty Huyler Gillies. A small, outwardly calm dynamo, Betty had started flying in 1928. Her motivation was the circumstance of finding herself in love with Bud Gillies, a Naval aviator. She worked endless hours after her stint in nurses training to get her Private license in 22 hours and 55 minutes. By the time September of 1942 had rolled around, she had married Bud, had three kids, and still managed to accumulate 1400 hours.

Betty had checked in on Sept. 7, 1942, one day after receiving her telegram. "I just happened to be first in line," she says simply. From then on women pilots came and went, or came and were hired. Those who were hired were immediately put to work learning to fly "the Army way", and attending continuous ground school. As of September 21, ten WAFS were hired. Of these, one



WAFS Nancy H. Love, pilot, and Betty H. Gillies, co-pilot, shown after delivering a B-17F 42-30897 to Modification Center, Love Field, Dallas, Texas. The date was 24 August, 1943. The women wore the wings of the Civilian Pilot, Air Transport Command. This is an official photograph by the U.S. Army Air Force at Love Field



Barbara Erickson (London) picks up her P-47 at Evansville, Indiana, to ferry to Long Beach (CA) Air Base. WAFS B.J., as she was known, won an Air Medal for her unusual number of ferry deliveries.

dropped out, and one was eliminated in flying. The women continued to come until by October 20th, twenty-seven "originals" were ready for orders. On October 22nd came the first assignment—to deliver Cubs (L4B) from the factory at Lockhaven to Air Bases.

These women pilots, now known officially as Women's Auxiliary Ferry Service, boasted an average of over 1100 hours each, and were expert pilots even before the additional Army training. And they were the best of more than 100 women who had applied. They adopted a WAFS uniform which was a soft shade of grey, and included a jacket, skirt, slacks, and overseas cap. They wore the wings of the Civilian Pilot Air Transport Command. The WAFS were so fond of this neat and suitable uniform that when they were merged with the women pilots trained under the command of Jacqueline Cochran who changed it to a specially designed blue, some of the women said they "will resign before I give up my greys." It was an understandable feeling, since the WAFS had literally become one with the Ferry Command.

The "Originals" were called an "elite corps" by Nancy herself. These top women pilots in the country were: Bernice I. Batten, Nancy Batson (Crews), Kathryn Bernheim (Fine), Delphine Bohn, Phyllis Burchfield, Mary Helen Clark, Barbara Donahue (Ross), Barbara J. Erickson (London), Betsy Ferguson (Woodward), Cornelia Fort (killed in service), Dorothy Fulton. Betty H. Gillies, Teresa James, Lenore L. McElroy, Helen McGilvery (deceased), Gertrude Meserve (Tubbs), Florence Miller (Watson), Esther Nelson, Barbara Poole (Shoemaker), Ester Rathfelder (Westervelt) (deceased),

Aline Rhonie (Brooks) (deceased), Helen Richards (Prosser), Adela Scharr, Dorothy Scott (killed in service), Evelyn Sharp (killed in service), Katherine Thompson (Rawls), Barbara Towne (Fasken).

From October through December they delivered Cubs from Piper, and PTs from Fairchild. The Ferrying Division continued to do it's own hiring of women pilots through January, 1943, but the "Originals" had already accomplished transition into higher powered aircraft, including heavy bombers and pursuits. Nancy Love saw to it that her WAFS were stationed and flew where they would do the most good. She planned housing, transition at pursuit schools, and ferrying assignments. She had Betty Gillies as her CO at New Castle Air Base, Delphine Bohn at Love Field, Dallas, Texas, Barbara Donahue (Ross) at Romulus, Michigan, and Barbara Erickson (London) at Long Beach, California. Like Nancy, these pilots were attractive, objective, and exceedingly able.

Thus Nancy Love's "plan" was developed. She had chosen her pilots not only for their ability to pass the check-out in a PT-19A; their passing the Army 64 physical exam, which was a 'must', but also their likelihood of getting along effectively as a "team". Her basic organization of Flight Squadrons, working under a Squadron CO, enabled the the WAFS to work side-by-side with the men of the Ferry Command. They qualified, as did the men pilots, through classes which included: flight procedures in the AAF, navigation, meteorology, code, filling out AAF forms, organization of the Air Base, military law, military courtesy, aircraft and engines, and ferrying responsibilities. They marched once a week in formal review with

the men, and they took the prescribed physical training. Each woman recognized it as a "wonderful experience", and they loved their duty. Nancy's concept was to use those already qualified, and no thought was given to the training of additional women. This was first proposed, unsuccessfully, to General Olds in 1941 by Jacqueline Cochran. It wasn't until November of 1942 that this became a reality.

The ferrying of the WAFS was loaded with experiences that were tinged with humor, still reflecting the long, hard hours

of work. C O Delphine Bohn of Love Field WAFS, Dallas, Texas, tells of the "unbelievable experience" of flying cross-country and landing at military bases. "We were the first to participate in coed barracks," she laughs. "We were users of the johns which were guarded by armed ODs. Needless to say, there was no hanky-panky."

The accommodations at other plases were not always as good. WAFS CO Betty Gillies, of New Castle Air Base, recalls the trials of ferrying a P-38 to California. Twice she tried to get through Tehachapi Pass en

hrough Tehachapi Pass en

a

C

ss

d

ss

s

Betty Gillies (R) and Teresa James (L) pose for the Air Force photographer after delivering a couple of P-47s to the modification center at Evansville, Indiana. As usual, the WAFS got a transition course (again) in aircraft and engines. The training and check-outs were ever-present, and the WAFS learned eagerly as they progressed in the early days of 1942-43.



WAFS (L to R) Dorothy Fulton, Kathryn Bernheim (Fine), Helen McGilvery, Nancy Batson (Crew), and Gertrude Meserve (Tubbs), study the specs for P-39s at the Buffalo, NY factory in January, 1943. They were to ferry these to California bases in Chico and Las Vegas.

route to Bakersfield from Phoenix. She finally gave up and returned to a fighter base in Palmdale, California. There were no accommodations at the Base, so she hooked a ride into the town of Lancaster with a USN Captain named Lockhart. At first the hotel told her—No Rooms Available! She informed them that she would sit in the lobby until one turned up. After a long and uncomfortable wait the hotel relented and gave her a small, noisy room. The whole town, with only one hotel, was overrun with cadet wives and sweethearts, the result being an "interesting mess—life in the raw."

The WAFS stationed at Long Beach, California, were under the command of squadron leader Barbara Erickson (London). She also was definitely not a desk-type C O The Base became exceedingly active, with Barbara flying every ferry mission she could. Often there was little or no time between jobs.

Without being aware that she was making herself eligible for the Air Force Medal, Barbara undertook a series of deliveries just because they were there to be done. She flew four 2,000-mile flights in three different types of aircraft in a five-day period of time. Her citation was signed by President Franklin Roosevelt, and the presentation of the Medal was made by General "Hap" Arnold at a special ceremony. It was fine recognition for an accomplished pilot, as well as an ultimate comprehension that the WAFS were doing more than their share, and were obviously highly qualified.

Among the WAFS stationed at Romulus Air Base was one who was famous in another field. Katherine Rawls had been a member of three Olympic teams, and excelled in diving. She began to fly during her brief marriage to a flight school owner named Thompson. When the Navy took over the airport, and her husband joined the RAF transport, she became one of Nancy Love's WAFS. Occassionally she, as did others, ferried an L-5, although her training. similar to that of most early day women, was in the bigger horsepowered aircraft. She recalls CO Nancy Love remarking wryly after a Cub flight, "It's like flying a tired rubber band." Her own experience after delivering the plane to West Palm Beach was to be told by an Officer who obviously did not like the L-5, to deliver the thing to Lake Okeechobee and dump it, then come back and he would sign for it. "I think he half-way meant it," she laughs.

Like the women Nancy Love had recruited, she was a genuine "working pilot". She never expected or asked of her WAFS a flight that she would not or could not do herself. By her side the first WAFS in the service, Betty Gillies, had shared many of the responsibilities of the "Originals". Both were very much alike in that they did the job with quiet effectiveness, neither woman wanting or seeking the spotlight. As WAFS Commanding Officer, Nancy was loved, even revered, as few leaders are. Thus it was that everyone in the Ferrying organization suffered with her, and with Betty as well, during one tremendous disappointment



Nancy Batson (Crews). WAFS, gets ready for a flight which won her a special Commendation from her Commanding Officer, Colonel Robert H. Baker, 2nd Ferrying Group, New Castle Army Air Base, Wilmington, Delaware. She delivered an AT-6 in record time despite difficult weather conditions, from Hagerstown, Maryland, to De Winton, Alberta, Canada



Teresa James, of Wilkinsburg.PA. was typical of the WAFS recruited into the "Originals". She had a Commercial Pilot's license obtained in 1933. After qualifying for her Flight Instructor's rating, she piled up hundreds of hours in the air before she was stationed at the New Castle Army Air Base, Wilmington, DE.



WAFS Nancy Batson (Crews) sports an Army issue '45' holstered at her belt, as she prepares to deliver a P-38. The women pilots were required to be checked out in side-arms and wear them while delivering planes with special or secret equipment. If they landed at unguarded airports, they had to sleep in or near their aircraft until they were able to resume their flight.

caused by two fateful circumstances—weather—and inadequate basic communication with the High Command. Added to this was the fact regardless of the unblemished top achievement record in flying and administration of these remarkable pilots; aside from the fact that they had flown everything the Air Force had to offer at the time; and despite the fact that men were flying successfully the ferrying mission they were then assigned—when the turn-down came it was for one basic reason; they were women.

The historical event was this...

Colonel Wm. H. Tunner (later as General Tunner he was the Commanding General of the Air Force Ferrying Command), who knew of the fine qualifications of Nancy Love and Betty Gillies, believed that this team was more than ready to ferry aircraft overseas. He also needed to stop some of the men's griping about this particular service, and he was certain that this would be accomplished by sending these two women pilots. He cleared the project with the Chief of Staff, in the absence of General Arnold, who was in London.

Nancy and Betty picked up a B-17, under Colonel Tunner's orders, to be flown to Presque Island, to Goose Bay, Labrador, and from there routed to England. They reached Goose Bay without incident, but were held on the ground a day due to bad weather. In London, General Arnold was unaware that a plane was being ferried by two women pilots. He did not know either



Just another Ferry job for WAFS (L to R) Katherine Rawls, Phyllis Burchfield, Nancy Batson (Crews), Delphine Bohn, Florene Miller (Watson), and Teresa James, Photographed by the AAF Technical Training Command, Wichita Falls, Texas, December 1942.



Evelyn Sharp, stationed at New Castle Army Air Base, Baltimore, MD (1943) completes her pre-flight inspection of the A-20 she is to deliver. Evelyn was later killed in a P-38 when an engine quit on take-off. She had flown everything from bombers to pursuits, and the freak accident was a matter of great personal sorrow to many. Among them was her invalid mother, who had depended upon her WAFS daughter for support. There not only were no benefits such as those granted men who flew for the Air Force, but the other WAFS had to collect enough in donations to take care of her funeral, including recovery and shipping of her remains.

woman, and was unacquainted with their fantastic air qualifications and abilities. When he learned they were ferrying a B-17, he immediately radio'd that they were not to take off on this flight. He also said, in effect, that women were to be limited to domestic ferrying only. (Later this was made an Air Force regulation).

The two WAFS received the message with shock and disbelief just as they were readying the plane for the last leg. So admired and popular were they with their male counterparts, that it was a deep hurt to everyone connected with the flight. It was, indeed, a most undeserved lack of confidence in the two original WAFS who had slowly and with quiet determination, climbed step by step to the very top in the Ferry Command. It particularly stung because there was no reason given—except that they were women pilots.

There were some lighter moments in Nancy Harkness Love's tour of duty with the Ferry Command. She relates some of these in a manuscript, which was underway at the time of her recent death from cancer.

"A very light, small girl (WAFS), forced to bail out over the mountains on a windy day, happened to have an extra large chute. Due to strong updrafts, it kept her floating for six miles, pursued on the ground by farmers afoot and in cars, all shouting up at her to 'Come down!"

She tells one on herself, which is very revealing of her genuine depth of character and her innate self-effacement.

"During early WAFS days we were obliged, among other routine indoctrination courses, to learn close-order drill. Being Commander, I had to lead the formation and give the commands, which because I was very self-conscious, was not one of my strong points. In fact, hating to roar out orders to such an extent that I occasionally drew a blank on what command to give next. This happened to me one dreary morning when we were drilling on an inactive runway. The Squadron was marching smartly down the paved runway toward its end, where there was a sharp drop-off of about ten feet. Panic struck me as we approached the precipice, and I found myself utterly incapable of giving the command, 'To the rear-March!'. So, off went twenty-four girls, still in close formation and roaring with laughter. Straight down the embankment they went, and into the field, leaving me standing at the top, still speechless!"

Nancy tells of ferrying her first fourengine transport with a WAFS co-pilot, seventy-two passengers, and a black puppy from San Francisco to La Guardia Airport.

"The plane was to be delivered to American Export Airlines, and was the first DC-4 to be assigned to them. So, the Chief Pilot and high officials were at the field at 1:00 P.M., waiting. They had never had such big ones before, and were much impressed by the size of the plane. They hurried aboard, walked up the long passenger aisle, opened the front cockpit door with expressions of triumph and welcome on their faces.

They stopped in a sort of frozen shock as their minds finally grasped the fact that the two happily grinning pilots were—women! Without a word, they turned and walked out again.. Regardless of this welcome (or lack of it), it was fun for us, anyway."

In speaking of the service she loved, Nancy had some pointed comments...

"As a result of our civilian status, we were not protected by any government insurance, and this wrong was never righted. It caused many serious hardships, such as the case of Evelyn Sharp, an original WAFS, who was killed at the age of 23, when the engines of her P-38 'Lightning' fighter failed on take off. She had been the sole support of an invalid mother. Not only was there no insurance available, but we had to raise money among ourselves for her funeral

expenses. A fund was later set up through contributions of WAFS and Officers to help in the support of her mother."

Nancy goes on to say, "Ours was the only women's service which was subjected, in line of duty, to the same hazards as the men. The airplanes we flew, after the first few months on trainers were complicated and powerful ... Before being qualified to fly fighters for any pilot, male or female, it was a requirement to go to a special pursuit school for four weeks of specialized training. This was doubly necessary since the pursuit types were single engine, so that no instructor could go along to correct errors in technique. One had to be right the very first time. They were powerful and often tricky planes to fly, with very fast landing speeds...Yet, we all loved the job, and



Squadron leader Delphine Bohn, CO of the WAFS stationed at Love Field, Dallas, Texas, ready for a ferry mission. There were between 115 and 120 women under her direction at one time. The first WAFS lived in the nurses' barracks. As their number grew, and other WAFS/WASP were coming and going in the Ferry Command, a special barracks was constructed just for them.



WAFS at the Fairchild plant in Hagerstown, MD, assemble to pick up PT-19s, a primary trainer, to ferry to Air Force Bases. Dressed in their winter flight suits (1942) they are briefed by the Control Officer. Captain Frank. (L to R): Betty Gillies, Squadron Commander, Nancy Batson (Crews), Esther Nelson, Mary Helen Clark, Teresa James and Evelyn Sharp.

realized how lucky and privileged were we to be in the group. It was fun to be part of a hitherto exclusively male domain, to see the expression on faces when we emerged as pilots from a 'hot' single place fighter, or a huge 80,000 pound bomber. There was great esprit de corps among us, and friendships made then are still kept up."

It is history now that Congress turned down the bid of these women for commissions, and sent them home in December of 1944. The "reason" that they were not needed was refuted by the facts—one of which that the war was (in June, 1944, when Congress voted them out) at high pitch,

since the invasion of Normandy had taken place only fourteen days before—and another that secret documents from the Ferry Command beg for the right to keep their women pilots. They stated that the WAFS were ferrying 70% of the single and twin engine fighters, and cited the cost of now having to train men for this job. The ferry command women pilots offered, in vain, to continue flying for only one dollar a year.

Nancy Love wrote of her "elite corps" that by June of 1944 she had "123 women pilots for the duration of our service, with the following qualifications:

including four engine bomber and transport planes."

In April of 1943 the first group of women who were trained with Jacqueline Cochran as head of Women's Flying Training, were graduated. Later Jacqueline Cochran became Director of Women Pilots, and the name was changed from WAFS to WASP

(Women's Airforce Service Pilots), and

other duties in addition to ferrying were

assigned. Nancy Love remained as Admini-

100% instrument (blind flying) rating.

80% single and twin engine fighter rating.

5 WAFS qualified on all types of aircraft.

98% twin engine rating.

strator of WASP in the Ferrying Division. History has shown that Nancy Harkness Love, and the woman who was in truth "her right hand assistant", Betty Gillies, together with their great "Originals" really started something with the WAFS. Once the initial "shock" of seeing a woman step out of pursuit plane or bomber was over, it was only a matter of time before male pilots had to admit that the aircraft didn't know a woman was flying.



Another B-25 safely delivered by WAFS (L to R) Barbara Towne (Gasken), and Barbara Erickson (London), after a long x-c across the continent from Long Island to Long Beach. The WAFS' enthusiasm for flying was boundless, especially for flying "the big ones".



First WAFS to be honored by the award of the Air Medal was Barbara J. Erickson (London), who was CO of the women assigned to Long Beach (CA) Air Base. She is shown with General "Hap" Arnold after receiving the honor, reviewing the men and women pilots at the air base.



In 1942 the dress uniform for the WAFS was a light grey with overseas caps, and Civilian Pilot ATC wings. The women posed in Great Falls, Montana, while awaiting their next ferry assignment. (L to R): Nancy Batson (Crews), Phyllis Burchfield, Delphine Bohn (Squadron CO), Kathryn Rawls (who had been a famous swimming star of the late '30s and early '40s), and Florene Miller.



The WAFS marched in parade before V.I.P.s, which meant practice with the men. Barbara (B.J.) Erickson (London) (L) Commander of the WAFS Squadron at the Long Beach (CA) Base, and Betty Tackaberry (Blake), who was a graduate into the ferry command from the first trained class from Ellington Field, Houston, TX, step out briskly ahead of the color guard in 1943.

The Ninety-Nines First Air Age Education Workshop

By Marilyn Ratziaff

"What can we do in air age education?" "How can we get school children involved in aviation?" "Isn't there some way we can help some of these people overcome their fear of flying?" She heard them all and for two years. Linda Hooker, the Ninety-Nines International Air Age Education Chairman, tried to answer each inquiry personally. "When it got to the point that I was sending out 10-15 page letters and still realizing that I could never send them enough information to really help, I came to the conclusion that what we needed desperately was a workshop. We needed a chance for air age education chairmen from each chapter to get together and really learn as much as possible about what it is, what's available and who to contact." And so began the groundwork for the first Air Age Education Workshop.

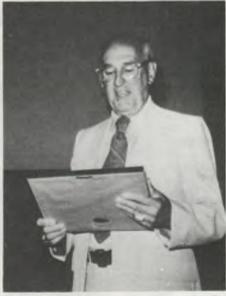
The first step was to obtain the approval of the Ninety-Nines Board of Directors. As soon as that was given, plans for a workshop began in earnest. Flanked by two very able assistants, Jo McCarrell, also from De Queen, Arkansas, and Carolyn Sullivan from Memphis, things began to roll. Linda and Jo attended every air age education lecture they could find to pick up ideas. Linda also made it a point to meet anyone that might have something to offer as a workshop speaker and they began to collect mountains of aerospace education literature. It took well over a year to put it all together.

Finally on July 10, 1978, the first Air Age Education Workshop became a reality. Eighty-three participants arrived at the University of Oklahoma in Norman to begin a week of non-stop air age education which began early in the morning with a 7:00 a.m. breakfast session and continued until at least 10:00 p.m. "Everyone was anticipating an interesting and profitable workshop," commented workshop coordinator Jo McCarrell. "That was obvious, considering how far some of these people travelled to attend." They came from all over the United States, Canada and even England. Many of the Ninety-Nines flew their own airplanes to the workshop, while the others arrived via airline into Oklahoma City. As a result, logistics and transportation had to be considered. To solve the problem, members of the Oklahoma Chapter were mobilized and they made countless trips between Oklahoma City and Norman transporting people and baggage. Somehow, everyone made it to the workshop on time and with their luggage, eventually, despite the 100°+ temperature.

The first day was spent gearing up for the workshop. In addition to the general arrival and registration procedures, a tour of the FAA facilities and the 99 Headquarters., both located at Will Rogers World Airport, was taken by the early arrivals. It was repeated again on the last afternoon for those who missed it the first time.

By banquet time Monday evening, everyone was settled and ready to get down to business. Dr. Wayne Matson, Director of the American Society for Aerospace Education, delivered the keynote address. His topic, "Aerospace Education: Many Things to Many People" outlined the scope of the project. He was followed by Betty McNabb's presentation, "The Day the Airplane Stopped Flying". She made it obvious that general aviation is such an integral part of today's society its demise would have an unbelievable impact on life as we know it. The tremendous importance of air age education on all levels from schools to community groups was clearly coming

For the rest of the week, workshop



The Ninety-Nines are fortunate to enjoy the strong support of the members of the aviation community and its industry. In recognition of his continuous support and encouragement, the Ninety-Nines honored Henry "Hank" Newman of the FAA with a certificate of appreciation for his years of work toward our common goal furthering general aviation.



Lois Feigenbaum, immediate past International President, congratulates Carolyn Sullivan, Jo McCarrell and Linda Hooker for their efforts in creating a highly successful workshop. The project was so massive in scope that it took well over a year to organize it.

participants met early and stayed late. They took notes, they watched films, they built 'hands-on' projects and they shared ideas. They laughed and they drank coffee, but most of all, they learned. They learned that air age education is an invaluable tool in turning children in the public schools on to learning, especially in the areas of math and science. They listened while Lorna Kringle and Helen Frizzell, two public school teachers from the State of Washington, presented the approach and teaching aids they use in their classroom. Then each participant tried her hand at building the models and demonstrating the principles. It brought the point home graphically. They watched presentations from the Boy Scouts' Aviation Exploring program, as well as programs from the Girl Scouts and 4-H groups.

In putting together the programs for the workshop, Linda commented that she had received tremendous support and cooperation from members of the aviation industry. This became obvious as one by one, Beech, Cessna, Jeppesen/Sanderson and GAMA each presented their approach to aerospace education. Other groups also lended support. As an example, the AWTAR Board voted \$500 to be used toward the workshop.

Also on the agenda was an entire segment devoted to education for the adult members of the community. Fran Grant and Jeanne McElhatton from San Francisco discussed their "Fear of Flying Clinics". Aimed at those afraid to fly on commercial airlines, they seek to dispel fear through education in a group situation. Not only are their clinics a success, they have a waiting list of those wishing to enroll.

On the other end of the same spectrum was Ava Carmichael's "White Knuckles to Cockpit Cool" presentation. While this is also education to dispel fear, it is aimed at general aviation. The Flying Companion seminars have been invaluable in educating people whose spouses or friends fly. Since these people often find themselves in the right seat, some general information usually makes flying more enjoyable.

Completing the workshop schedule were presentations from FAA and Oklahoma Aeronautical Commission representatives,



Simple, dimestore variety balsa wood gliders are a valuable tool to demonstrate the characteristics of flight. The plane's flight characteristics can even be modified by adding tinfoil flaps.

the Civil Air Patrol, information on careers in aviation and even how to start a speakers' bureau.

In short, the Ninety-Nines first Air Age Education Workshop covered almost every conceivable area of aerospace education. The primary goal, which had been to enlighten individual chapter air age education chairmen, had been accomplished. Now the emphasis will shift to the local level. Armed with their newly acquired knowledge, the Ninety-Nines will begin to put these ideas into practice.

Credit for the resounding success of the workshop must be given to International Air Age Education Chairman Linda Hooker and her two associates, Jo McCarrell and Carolyn Sullivan. Considering the magnitude of the project, the effort involved in planning, organizing and executing the workshop became staggering. It becomes even more impressive to realize that Linda Hooker accomplished the majority of the Ninety-Nines' air age education efforts almost single-handedly. But this is only the beginning. The real indication of the workshop's success is yet to come.



Helen Frizzell, left, directs the progress of the balloon faunching. An elementary school teacher from Seattle, Helen and her associate, Lorna Kringle, have used the hot air-helium balloon projects with marked success in the classroom. Students are stimulated to study other subjects, such as math and English, as a result of 'hands-on' learning.



Charlene Falkenberg, a Ninety-Nine from Indiana, holds a delta dart she constructed. This is another project which uses easily accessible materials and is simple enough for the younger set. Models such as these made it easy to visually demonstrate the function of aircraft components.



Workshop participants not only learned during the week-long seminar, they had fun. Many of the projects were done in groups, which teaches another valuable concept - teamwork and cooperation.



The workshop concepts and ideas were much more than academic. Participants actually made the 'hands-on' models themselves to understand the teaching aids thoroughly. Most of the projects are simple enough for younger children to accomplish, yet are capable of demonstrating various principles of flight.

Up, Up & Away ...

By Betty Jo Ault

... with hot air and helium balloons, delta darts and paper airplanes.

"This seminar has given us confidence to initiate air age education projects in our own area." Nancy Jean Rand — Alberta Chapter.

"Superlative! Comprehensive! Inspirational!" Jo Payne — Austin Chapter.

"For me, the workshop was a fantastic opportunity to cull the ideas and experiences from the repertoires of the other participants." Suzanne Brooks — British Section

"This has been a superior program and very useful for all of the chapters." Carolyn Sullivan — Memphis Chapter.

These are only a sampling of the comments expressed at the conclusion of the Air Age Education Leadership Development Workshop held in Norman, Oklahoma, July 10th - 13th.

Eighty-three Ninety-Nines from the four corners of the United States, as well as Canada, Great Britain and the Caribbean attended this important first for the Ninety-Nines.

After long months of preparation, the dream of an Aerospace Education Workshop came into reality, under the capable leadership of Linda Hooker — International Air Age Chairman. Along with Jo McCarrell and Carolyn Sullivan, the workshop committee gave endless hours of work, effort and sincere devotion to make this project a complete success.

It seemed that every area or facet of aerospace education was covered; whether it be elementary, intermediate, high school or adult. New programs, materials, and audio visuals were explored, as well as some "tried and true" ones. Cessna, Beech, Jeppesen-Sanderson and the FAA presented their programs along with the Civil Air Patrol, Boy Scouts of America, Girl Scouts of the United States of America, 4 H Clubs and the Oklahoma Aeronautical Commission Program. Betty McNabb of the Civil Air Patrol, and Mary Anderson, FAA, shared with all their insights and experiences in the field of aviation. Career Education was also included, as well as information on "Fear of Flying Clinics" within local chapters. Guide lines were offered for the formation of a chapter "Speaker's Bureau". However, the highlight of the three day program were Lorna Kringle and Helen Frizzell and their

approach to introducing aerospace education to the community. Their enthusiasm and quick pace kept the long hours of the workshop moving and enjoyable as well as educational. These sparks of enthusiasm seemed to spread among the participants at a fast rate until all were giving forth and sharing ideas and experiences that they or their chapters have had in aerospace education.

As Ninety-Nines arrived in OKC, the Oklahoma Chapter members were wonderful hostesses in making everyone feel at home and welcome. After all had registered, the workshop program began with a "get acquainted" wine and cheese hour followed by a banquet dinner. The keynote address was delivered by Dr. Wayne Matson, Executive Director, American Society for Aerospace Education.

At the conclusion of the program, certificates were presented to all participants. Also an award was made to Henry "Hank" Newman, for his time and devotion to the field of aviation and his continued support and help given to the Ninety-Nines. Amelia Earhart awards were presented to Jo McCarrell and Carolyn Sullivan for their



All it takes is a pipe, a few fuel cans and a paper balloon for a balloon launch. This is another excellent teaching aid, simple, but effective

work and time devoted to the Air Age Workshop.

Tours of the FAA facilities were also made available on the first and last days of the workshop.

By the end of the week it was clearly evident that the participants in the workshop truly knew the purpose of the Ninety-Nines... to promote aeronautical science... and education. Their combined talent, education, experience and devotion to this cause, will definitely be noticed as they share it with their chapters, the community and the world.





Helium-filled balloons are an excellent way to demonstrate winds aloft and weather principles. Each of these balloons has a return card attached. Some were found and returned.

A short course in aviation for the non-flyer

Flying Companion Seminars



Ava Carmichael

By Ava Carmichael

The presentation of the first Flying Companion classes for those reluctant copilots was motivated by the crass need for money. An empty treasury confronted us at the same time as did the hosting of the Southwest Sectional. Both problems were solved by inviting a few wives to come and pay us to teach them something about the mysteries of flying.

Don Best, Aviation Safety Director for the FAA was an invited speaker for this first, and what we expected to be the last, such venture. Although we had scheduled sessions for Friday and Saturday morning, we found both students and teachers reluctant to leave. We all had a good time, we were stimulated, and some little ember started to glow.

On Monday morning, Don Best fanned the banked fire by asking if we would like to do another course with the co-sponsorship of the FAA.

Registration for our first joint-sponsored course left us with cauliflower ears. Four hundred calls later, we finally took our phones off the hooks. We were thoroughly convinced that a need for our type of course definitely existed. We were particularly surprised that most of our callers were men signing up their unsuspecting women friends. It convinced us that we had better "get with it" if we were going to have this kind of response from total strangers.

Don Best's successor, Bob Griscom, continued to cooperate in presentations over the next couple of years. Since we were sure we would fulfill the demand and scrape the bottom of the barrel with each presentation, the hand-outs of material were stuck in a closet or the trash after each course. The idea wouldn't die; we were in demand and the barrel proved bottomless.

If this were going to continue—and by this time we all wanted it to—we needed a textbook. There was no such book! Breathlessly we struggled to cover thoroughly each subject. We had become almost evangelical in our desire to impart helpful knowledge to the students. We still could not cover everthing and couldn't hope that even half of it would be remembered. From this need the book "From White Knuckles to Cockpit Cool" was born.

Again, since each course was presumably to be the last, sketchy notes were kept regarding the many little details of setting up the course. As different chairmen took on each successive course, the same problems were presented to each one. With the realization that this was going to become a continuing project, an SOP was written and printed

With these two basic pieces giving the How and the What, we have found successive presentations relatively easy. There is still room for much originality in the presentation of each topic. The general subjects covered were the same, but the personality of the individual member was projected. All of our members cooperate. All of them have been teachers at the Seminars, and we really believe that All feel they have benefited by adding to their own knowledge as well as providing a much needed service. As Anna said in "The King and I," 'It's the teacher who is taught.'

The result for the San Diego Chapter is

that we have developed within our group a cohesive and mutual admiration society. This "all for one" feeling has given us the courage to undertake spearheading the project of rebuilding the Women in Aviation exhibit destroyed in the recent Aerospace Museum Fire.

Strangely enough the funds produced by "The Flying Companion Seminars", are pleasant byproducts of our learning and teaching efforts. These receipts permit us to promote aviation. We enjoy doing the Seminars!

Ed. Note: Following the success of the San Diego Chapter's Flying Companion Seminars and the development of textbooks and SOPs, many other chapters from California to the Bahamas have begun to conduct seminars of their own, all with marked success. For more information on the seminars and where to obtain textbook material, write to The 99 NEWS, P.O. Box 59965, Oklahoma City, OK 73159.



Students in the San Diego Chapter's Flying Companion Seminars learn some of the basics of aviation plus navigation principles so that flying will be more enjoyable to them.

99 Profiles - Then

Opal Logan Kunz

By Jean Alyea

In June, 1929, a prominent young New York socialite received her pilot's license. By December of the same year, the young woman, Opal Logan Kunz, had flown in the first women's transcontinental air race and had played an important role in the organization of the Ninety-Nines.

Opal was the wife of George Frederick Kunz, who was a notable gem expert and vice-president of Tiffany & Company of New York. Opal was socially prominent and counted among her close friends many leading military and other government officals and their wives. Newspapers often referred to her as "the best-dressed aviatrix" of her time. She was also an accomplished concert pianist and organist.

By the late 1920's many women had become interested in learning to fly, and Opal was no exception. She began taking lessons and purchased a cream-and-gold Travel-Air in Albany. This was the first of five aircraft Opal was to own. Close friends, the Thomas A. Edisons, attended the hangar party she held on July 4, 1929, at the Newark Metropolitan Airport to celebrate her purchase and the fact that she had received her license (#6830) in June. Mrs. Edison christened the new plane "The Betsy Ross".

"The Betsy Ross" was a J6-300 with a NACA cowling, Wright-Whirlwind engine and a variable pitch propellor. It was occasionally flown by Captain Jack Donaldson in aerobatic benefit shows in the

When the 1929 derby was organized, Opal decided to become one of the contestants. Requirements for the race (according to Louise Thaden) were a total of 50 hours, ten of which had to be a cross-country flight of at least 100 miles from the home base. The race, sponsored by the Santa Monica Bay Exchange Club, included \$8000 worth of prizes and was part of the program of the National Air Races. Nineteen women entered

Officials were of the opinion that Opal's 300-hp. Travel-Air was too fast a plane for a woman to fly, and she was told she could not enter it in the race. So she rented another Travel-Air, a J5-200-hp., to fly the route from Clover Field, Santa Monica, to Cleveland, Ohio, on August 18 to August 26. Opal flew in the heavy plane class, and her time in the race was 18 hours, 44 minutes, 27 seconds.

Although several smaller organizations of women pilots had been started around the United States, it was the 1929 derby that was the actual catalyst for the start of the Ninety-Nines. It was the first time that there were a large number of really active women pilots together in one place, and the esprit de corps among the racers was tremendous.

At stops along the way, Opal and the other women pilots flying the derby talked about the idea of starting a nationwide club for women pilots, and when they reached the terminus at the Cleveland Air Races, they were ready to get down to serious work on forming the organization.

Several meetings were held to "get organized to get organized", and letters explaining the purpose of the proposed organization were sent out to all 117 licensed women pilots.

In the middle of December, 1929, a meeting was held at Opal's penthouse home in New York. Charter Members who attended that meeting still recall that Opal served "the most delicious egg nog" and the ice cream served with cake was in the form of waving flags.

Opal was chairman of this meeting, which was actually an organizational meeting.

A constitution and by-laws were discussed, as well as an insignia for the group. The women decided to divide the country into regions and suggested the following people to head them up: Gladys O'Donnell-West Coast; Phoebie Omlie-Middle West; Joan Shankle-New England; Louise Thaden-Pennsylvania; Blanche Noves-Ohio and Michigan; Laura Alexander-Southeast; and Margaret Thomas-Texas. All the women accepted these offices. It was then up to them to get chapters organized in their regions, preferably with each state having a chapter. A slate of officers was also chosen, and these names were submitted by mail to the membership.

The meeting at Opal's house was a most productive one, and actually was the true organizational meeting.

In January, 1931, Opal's patriotism led her to found the Betsy Ross Corps, a reserve organization of women pilots who volunteered to serve on non-combatant duty in case of national emergencies. The purpose



Opal Logan Kunz, second from left, and two friends pose with Navy pilot Dick Alley, right.

of the Corps was to ferry planes, provide first aid, give flight instruction, and raise money for charities by competing in benefit air meets. Membership was open to all 300 licensed women pilots of the time, and on May 9, 1931, approximately 100 women were sworn into service at a meeting at Memorial Continental Hall, Washington, D.C. The women selected blue uniforms with Scottish hats.

Opal was national commander; Mrs. Pansy Bowen, Sacramento, who then worked for a weather station in Visalia, Tulare County, was lieutenant commander of the west coast camp in the Army Ninth Corps area, which was started up in June. Florence "Pancho" Barnes was originally slated for this position.

Opal kept the Betsy Ross Corps going for about four years before she ran out of funds to support it.

In a letter sent to members of the Ninety-Nines, she stated her reasons for forming the corps:

"As a member of the Ninety-Nines you are entitled to know my reason for organizing the Betsy Ross Corps as a distinct and separate thing, rather than carrying on the work of National Defense as a committee of the Ninety-Nines. I've resigned as a chairman of Committee of Defense of the Ninety-Nines."

"My reason for doing so is very simple. That the subject of National Defense is so large and so very important that I have found it impossible to do this work creditably as a part of anything else. The Betsy Ross Corps is not designed to oppose any other club in the country. After consulting many officials, as well as members of the American Legion, the Reserve Officers Association, and other partiotic societies, it has seemed that there is a need for a corps of this sort."

Another facet of Opal's personality was her interest in air racing, and she entered many. In September 1930 she became the first woman to win an air race in open competition with men in a pylon race at the American Legion Benefit Air meet in Philadelphia.

Her interest in national defense was still strong at the start of World War II, and she became the primary flight instructor at the New Bedford Municipal Airport, and was one of 50 women teaching college students to fly under the Civilian Pilot Training Program. She taught at Brown, Providence College and Rhode Island State College. (Students training under this program pledged to enter the Air Corps after completion of the program.) She later instructed Navy pilots, and in all, trained about 400 men.

To Opal, this was the peak of her flying career. In a newspaper interview in 1961, she commented, "The boys were surprised when they first saw I was going to be their flight instructor. But it wore off quickly. I didn't do it to make a living, but because I wanted all my boys to come back alive.

"I trained about 400 boys and it was easily the highlight of my career. I really became a sort of foster mother to them. You would be surprised how many of my boys brought their wives and children to see me after the war."

Following World War II. Opal was an inspector at Aerojet-General Corporation in Sacramento until she retired.

Widowed in 1932, Opal lived alone in Sacramento with her three pet collies. Her interest in defense and her patriotism never waned—the day after the Soviet Union orbitted the first spaceman, Opal wrote to President John F. Kennedy and volunteered to become an astronaut. She received a letter of thanks from the White House. Her

purpose, she stated, was to take the edge off the Russian propaganda.

Opal Logan Kunz died in 1967.

References

Much of the material on Opal Kunz was gathered from Opal's scrapbook, which was given to Mrs. Martha Bost, of Orangevale, California. Clippings and notes from the scrapbook were forwarded to the Ninety-Nine News by Mary Ben McClave, Sacramento Valley Chapter.

Additional information was obtained through conversations with Charter Members Mildred Chase MacDonald and Louise Thaden, both of whom were present at early meetings.

Compiled by Joan M. Alyea



The wording on Opal Kunz' Private Pilot's License reads 'This Certifies, That the pilot whose photograph and signature appear hereon is a Private Pilot of "Aircraft of the United States". The holder may pilot all types of licensed aircraft, but may not for hire, transport persons or property, nor give piloting instruction to students....' It was issued January 31, 1930.



Martha Bost displays Opal's scrapbook and a few of her trophies.



Mrs. George F. Kunz' new plane was christened by Mrs. Thomas A. Edison August 21, 1929. The affair was so formal even the pilot wore an evening dress.

99 Profiles - Now

Julie Clark Ames

By Joan Alyea

Years ago, Captain Ernie Clark had a willing passenger in his daughter, Julie Clark Ames. Today Julie (Golden West Chapter) is a co-pilot in the same type of aircraft, with Hughes Airwest, the airline her father helped found.

Julie was hired by Hughes in November, 1977, as the airline's second woman pilot. Assigned at first as co-pilot on a twin-engine turboprop Fairchild F27, she is now training to fly McDonnell-Douglas DC9 jets out of San Francisco.

Julie's path to the cockpit was marred by tragedy. Her father died in a plane crash in 1964, enroute from Reno to San Francisco. Investigators found that he had been shot by a mentally-deranged passenger--his death is the reason cockpit doors are now locked in flight.

Raised by an aunt and uncle, Julie stayed on the ground for a number of years. Then, leaving college in her senior year at the University of California, she was accepted by TWA for training as a Flight Attendant, adding six months to her age to get in. TWA found her out just two days before graduation—Julie is convinced that she was allowed to graduate only because she was to receive an award for best trainee.

Julie decided to aim for the cockpit and began flying lessons, soloing in March, 1969, at San Carlos, her home town.

She switched to World Airways, working as a Flight Attendant in the summer season, and taking leaves to work on ratings in the winter.

In 1975, Julie married Rick Ames, now also a Hughes Airwest pilot, while he was in the Navy. Her multi-engine and CFI rating were financed by money made importing antique Japanese clocks from a man met in Korea while on a World Airways Flight, which she sold to Navy families.

She became active in the Lemoore Aero Club, qualified for her commercial certificate, and delivered parts by air to farmers in California and Nevada for a tractor leasing company.

She and Rick bought a Rockwell Commander 112A, which she and Dianne Mann, co-pilot, flew in the 1976 Powder Puff Derby.

When her husband left the Navy to pilot for Hughes, Julie went to work as a flight instructor for a Cessna dealership. She found herself piloting charters, and also being used for public relations--her boss sometimes insisted that she serve drinks to the passengers while the plane flew along on autopilot. The experience was valuable, however, because it helped her to become the first woman pilot ever hired by Golden West Airlines, the largest commuter airline. Julie had already taken intensive training in Canada in the DeHavilland "Twin Otter" flown by the airline.

The next step was a jet certificate (Julie estimates that she has spent around \$15,000 on her training to date). A jet requirement is not always necessary for male pilots with the equivalent of Julie's experience in the air, but Julie and Rick feel it was a wise investment.

Julie reached her goal when she was hired by Hughes Airwest. "I've always wanted to fly for Hughes," she explained, "because of the heritage behind it all."

Southwest Airways had been formed by Julie's dad and Captain Bill Hughes (no relation to Howard Hughes) in 1946. In 1952, the name was changed to Pacific Airlines, and in 1968 Pacific merged with West Coast Airlines of Seattle and Bonanza Airlines of Phoenix to become Airwest. Hughes' Summa Corporation bought the airline in 1970.

One roadblock, the fact that her husband also flew for the airline, was removed when the only other woman pilot married another Hughes pilot, and Julie was soon hired.

Julie's father is a passenger on her flights in memory; his Southwest Wings today are pinned on the inside of her uniform coat behind the ones she wears on the outside.

Her husband's support has also helped her to reach her goal.

Home is now Morgan Hill, six minutes away from the Morgan Hill Airport, where their T-34, "Wally", lives, and spare time is spent by Julie--practicing aerobatics.

Captain Clark's daughter has made it.



In June 1977 Julie C. Ames was First Officer for Golden West Airlines. Preflighting the DeHavilland DHC-6 "Twin Otter" was one of her duties.



Julie's goal was to fly for Hughes Airwest. She made it and is currently assigned as co-pilot on a Fairchild F-27A.



In her spare time, Julie is an aerobatic instructor for Smoke-Air Enterprises, Phoenix, Arizona. She enjoys competing in this Pitts S-2A when time permits.

Rhea Seddon, M.D.

By Janet Green

When the first American woman goes into orbit sometime in 1980, chances are one in six, perhaps better, that she will be a Ninety-Nine. Rhea Seddon, member of the Memphis Chapter, has an excellent chance of being the first U.S. woman to make the trip. Among the 34 new astronaut candidates (selected from 8,000 applicants), six are women, but Rhea is the only Ninety-Nine in the group.

A native of Murfreesboro, Tenn., Rhea Seddon was born on November 11, 1947. She is the eldest of two (both girls) children and very quickly developed a glowing personality and an excellent sense of humor to go with natural good looks and intelligence. All of these are combined with a strong sense of dedication and responsibility. Perhaps even more significant however, is her burning passion to accomplish almost impossible goals. High school teachers remember her as a leader, first in line, enthusiastic, and always very efficient. With these traits, the fact that she chose medicine as a career should have been no surprise to her relatives and friends, but it was. "People kept telling me, you'll never get married if you do these crazy things," she

After completing pre-medical training at the University of California at Berkeley, Rhea was accepted by the University of Tennessee College of Medicine in Memphis, and graduated in 1973. She interned and completed a three-year residency in surgery in Memphis hospitals.

While she was a medical student, she took flying lessons with time snatched here and there from an extremely busy schedule. Her instructor remembers her as a "good student, very intelligent, and very determined. She did extremely well on the written tests, of course." Most of her flying time of about 100 hours has been in a Cessna 150. Her instructor was not aware of her ambitions to be an astronaut. "It came as a complete surprise when she asked me to be one of the references for her application," he said. It surprised others too. Rhea's sister commented "You're crazy. You're willing to pass up \$100,000 a year as a surgeon to go into a \$22,000 a year job." Rhea said, "money wise, it will probably cost me more

than any of the other women because my earning capacity (as a surgeon) is so much greater. But this is what I want to do, so I'm going to do it. I feel the burden to succeed especially because of other women who want to go into the space program. They will be looking to us to do well so that NASA will accept more women in the future."

The sudden publicity and attention that came with acceptance into the space program has changed her. She has become more aware of how she looks and sounds, but she handles it all with equanimity and grace. She continues to be impressed when

someone wants an autograph and poses willingly and even delightedly with celebraties or school kids for pictures.

Yes, there is a strong possibility that a Ninety-Nine will be the first American woman to go into space in 1980, and with Rhea Seddon, we could not have a better choice if we had picked her ourselves.

Acknowledgements

Photo by Phyliss Smith, courtesy of The University of Tennessee. Other data and information courtesy of the Tennessee Medical Alumnus.



Chances are one in six that Rhea Seddon will be the first U.S. woman to make the trip.

The Joys - And Rewards of

Airmarking

Ed. Note: The chapter has completed over 600 airmarkings to date.

Tip of Texas Ninety-Nines

"Another 'Senior 1946'—wish someone would break a leg putting that on the water tower—and the name on that RR Station so dim from lack of repainting—and that darned float 'gas gauge' sinking lower and lower!"

These might well be the thoughts of a lost pilot, low on fuel, as he searches in vain to identify a strange town from the air. And one does have to fly low to read the City Limits signs! This has provided the reason for a group of women pilots to organize, not for tea parties, but to do some good for the hobby and occupation they love. The Tip of Texas Ninety-Nines have devoted ourselves to airmarking, i.e., painting the names of towns on roof tops in letters large enough for a pilot to read.

We have had to finance the airmarking entirely by ourselves. Rummage sales, flight rides, decorating scarves, and donations by members have been our only sources of revenue and we are never operating in the black. As we have always felt that an airmarker on a roof in town was much more effective than one on an airport, and because of our financial situation, we have asked that we be paid for the paint used when we put a marker on an airport.

With the exception of our templates which were designed by Blanche Noyes, the chapter has designed and made all of our equipment. Our station wagon loaded for airmarking includes: 22' ladder on top, roof leveler, border marker, chalk lines with blue and red chalk, 7 & 10' templates, black, silver and two types yellow paint, thinner, cleaner, brushes with holders and buckets, wooden elevator box with rope to carry up paint, stubby brooms, rags, steel brushes, yard sticks, measuring tapes, emergency kit (includes snake bite kit), brake fluid, oil. water for car, coolant, flashlight, pliers, screw driver, ice pick for paint draining, can openers, thermos with water and lemonade, hand cleaner, straw hats, extra paint clothes, shoes, and newspapers and paper bags for trash. We have no room left for luggage so clean clothes must be carried in a paper bag.

Our first step towards an airmarking is to fly over the towns to be marked and select two or more likely buildings in each town for the site of the markers. The multiple selection is because we can't be certain of the condition of the roof from only an aerial inspection. Marker sites are chosen as near the center of town and along railroad tracks if possible. As there are few buildings ideally suited for markers, we have to do with the



All it takes is a little ingenuity and a lot of hard work. With that combination, anything can be airmarked

best available, whether it is quonset type, flat roof, or some with too great a pitch; even sometimes the top of an oil tank!

The second step is a trip by car to inspect the buildings and obtain permission to use the one with the best roof. We have always received the fullest cooperation-perhaps partially from curiousity. We do not do a job on Sunday and from experience have learned to be sure that the owner does not object to any other specific day. Sometimes we are finished with a sign before the place of business is open. We do not wear shorts or smoke on a roof and never have more than four persons on a roof at the same time. We possibly are passing up a great opportunity by not becoming 'roof salesmen', as it doesn't take long to know a good roof and sadly we have at times had to say "we could easily damage your roof" after seeing it. A few times the owners have learned through us that they have been "taken' by roofers. One elderly owner in San Marcos showed us an invoice of his 'new roof'. His 'new roof' had part of our old sign that had been painted five years earlier! If a person could see how paint preserves metal roofs, we believe all roofs would be painted as soon as they are 'cured'. Vinegar or store bought etching material cannot do the job as well as time and the elements do and of course a cured roof is a must for painting and the temperature must be between 60 and 100° when the paint is applied.

At last we are ready for the actual airmarking. We take the loaded station wagon and head for the selected sites. Seldom are there four of us and sometimes only two, but if daylight hours permit (and we have had to finish more than once by flashlight), and travel is not too far, we hope

to accomplish from three to five signs a day. Repaints, because of preparation, require more time than new signs so we have to be satisfied with fewer per day. We may have to jump from one roof to another, shinny up a pole or climb through a skylight, but we have always managed. Two of us measure and lay out—if roof is long enough we add up to an extra 8' between each letter to ordinary spacing using chalk line rather than templates. As illustrated by the photos the black 7½" border is started first and we never have to 'stretch' over an already painted area and be fearful of stepping back into wet paint.

We have spilled paint not only on the roof, but on ourselves; misspelled the name of the city, and have done anything else that could possibly be done. A sandwich at lunch after



Airmarking isn't always confined to runways

a good breakfast, dinner at evening, and then a good night's sleep so as to be on another roof at daylight the next day.

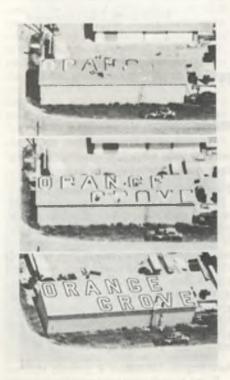
We will always have good laughs and memories and many stories to tell. Rain didn't allow us to paint one day after laying out was finished. Possibly a week later as three of us were climbing onto the roof at daybreak with only paint and rags, a rancher in a pick-up drove up (all Texas ranchers own at least one pick-up). We politely answered all his questions, but kept working. Soon we had a huge audience with the rancher telling them how wonderful we were to just climb up there and start freehanding the sign without even a ruler to measure. As we climbed down they handed us each a Coke and they couldn't believe we didn't receive any pay. Surely we each felt a little guilty in not being more honest.

There have been many offers of jobs and once two of us left one on the roof to finish while we went across the highway (in a very remote area) to repaint a Grocery Store sign for the depressed, recently widowed lady. True, it was yellow and black but really an eye catcher. We need to go that way again soon.

After two hard days work, comes the long drive home, usually at night. Then to clean brushes, to prepare the station wagon for the next trip, to make ourselves presentable once again, to earn some more money for paint, to think about the old friends and the new ones we met, and wondering if those big globs of yellow and black paint will help anyone today who thought they were ever so secure with their fabulous radio equipment.

Therapy? Yes! And much satisfaction.

Tip of Texas Ninety-Nines are grateful to past members and all of those who have and are making airmarking possible.



99 Airmarking We Were There!



Batavia. Ohio 45103 Phone: (513) 732-2411

Air Racing

Then

By Pat McEwen

Seven women—a pretty actress; an avid horsewoman; the wife of an Australian journalist; a noted parachutist; a sales representative for an aircraft company; a New York society leader; and the aviation editor of "Cosmopolitan" magazine-what did they have in common? They were all contestants in the first "Women's Air Derby". On August 18, 1929, women race pilots-in 20 airplanes-lined up in two rows on the runway at Clover Field near Santa Monica, California. At one minute intervals, one by one, the contestants took off for Cleveland at the wave of the starter's flag. The challenge of a cross-country race was an opportunity for these women to prove that they were accomplished pilots and navigators. Fourteen finished the 2700 mile race.

The early air derbies were usually a part of the National Air Races taking place in Cleveland, Ohio each year. The first derby, starting in Santa Monica, with Cleveland and the National Air Races as its final destination, had prearranged stops each day. No night flying was permitted and 8 days were allowed to finish the race.

The women flying these early races were competitive, good-natured and shared the camaraderie that resulted in close friendship lasting for many years. Then, as now, one of the great fringe benefits of air racing is

the friendships to be made.

Wichita, Kansas was one of the prearranged, enroute, night stops for the 20 contestants in that 1929 classic. The headline of the "Wichita Beacon" Friday, August 23, 1929, read, "Here They Are-Wichita's Distinguished Guests Today." A whole page was devoted to pictures and biographies of the 1929 "lady racers". Notable among them were: the pretty actress, Blanche Noyes; the horse-woman, Margaret Perry; the Australian Journalist's wife, Jessie Keith-Miller; the sky-diver, Phoebe Omlie; the aircraft representative, Louise Thaden; the New York society leader, Ruth Nichols; and the aviation editor, Amelia Earhart. These seven women, with the addition of nine other contestants in this historic race, went on to become sixteen of our beloved Ninety-Nines charter members in the fall of 1929.



Rolling for takeoff in this picture of the 1929 Air Derby is Thea Rasche in a Gypsy Moth. Lined up and awaiting their turn are (1st Row,L-R) Bobbie Trout in a Golden Eagle; Edith Foltz in an Eagle Rock Bullet; Marvel Creason in a special Travel Air J6-7; Pancho Barns in a Travel Air J-5; Blanch Noyes, also in a Travel Air J-5' and Louise Thaden in a Travel Air J-5 with a speed wing and the first of the full NACA engine cowls. In the 2nd Row are Gladys O'Donnell in a Taperwing Waco; Ruth Nichols in a Rearwin Ken-Royce; Margaret Cooper in a Spartan; Amelia Earhart in a Vega; and Ruth Elder in a

Picture provided by Louise Thaden

Photo Credit: John Underwood

Now

By Jan Million

Now, almost 50 years later, we have many of the same challenges in cross-country racing as in those earliest years. Even the course of the 1975 Powder Puff Derby, from Riverside, California to Boyne Mountain, Michigan resembled that initial 1929 route. But the women in the 1975 race only had half the time to complete the course and had much more reliable equipment and navigational aids with which to do it.

Most cross-country speed races today, even those requiring the pilot to be IFR rated, still require contestants to fly only during the daylight hours and in VFR conditions. But with the increasing sophistication of both pilots and their aircraft have come refinements in the strategy involved. Pushing the prop and throttle to the wall is still the rule but much more than that is involved in determining the winner.

Speed Races Today are Handicap Events

Cross-country speed races existing for women today are handicap events. Each make and model of aircraft eligible for entry is assigned a handicap (usually approximately 20 MPH less than the top speed of that aircraft as determined from manufacturer's data or actual flight tests). The difference between an entrant's actual ground speed over the race course and her handicap then becomes her score. To win. you must beat your own handicap by a wider margin than anyone else beats theirs.

Selecting an Aircraft

If you already own your own aircraft and

you know that you are going to fly that one and no other if you want to participate, then you do everything possible to make that one

If you are going to procure an aircraft for the race by begging, borrowing, renting, etc., then you can afford to take some other things into consideration. You'll want to fly everything you can get your hands on over a measured course (same one, each plane) to determine which one beats its own handicap by the widest margin. That's obviously (other things being equal) the one you want.

Weather

Weather is such a critical part of race strategy that many avid contestants hire private weathermen to tell them when to fly and at what altitudes. You can also be your own expert through diligent study of old weather charts for the areas you'll be penetrating—knowing prevalent systems and storm patterns typical of each area for that time of year and how they effect wind patterns and basic VFR conditions.

Flying the Race

Flying the airplane takes a perfectionist attitude also. You'll want to be "Silky Sally" at the controls—with every takeoff, every turn on course, every level-off from climb a smooth and precise maneuver. Planning and practice are in evidence at this stageknowing your airplane, knowing the course, and planning and executing your flight with care and precision. Planning, or the lack of it, becomes pretty obvious when you reach the end of each leg, too-remember, this is mainly a full throttle event, and it's both embarrassing and costly (score-wise) to find you have to pull back throttle to stay below red line when you discover you're only 6 miles from the airport and have to lose 4000 feet before you can do your fly-by.

It should be fairly obvious by now that with all the time and effort you've expended brushing up on your flying techniques, relearning the performance characteristics of your airplane, plotting your course, meddling with meteorology, not to mention the intimate acquaintance you and the wax can have had with such obscure parts as the belly of the airplane—that you're bound to become a better pilot. Even if you have three flat tires on the morning of takeoff and miss the whole race, you will have become a better pilot just through your preparation.



Pre-flight planning is essential, especially the weather briefing.

Why do we race?

The real competitors, of course, are there to WIN! Margaret Mead, veteran racer and oft time winner of the famous Powder Puff Derby, was asked by some students in one of her race clinics, "Margaret, why don't you ever just enter a race 'for the fun of it"?" For Margaret, the fun of it was not just going along for the ride; the fun of it was WINNING!

But not everybody feels that way. Racing is a learning experience—the inspiration to improve your piloting technique while making some warm and lasting friendships with other women pilots. And don't overlook the neat places you get to go for the start and terminus—mini vacations resort-type areas at each end of the race.

While each and every contestant learns something from one of these events (the author will be glad when she reaches the stage where she's learning what to do instead of what not to do), not everyone is a die-hard competitor. Our former Ninety-Nines President, Lois Feigenbaum, was once heard to say at the start of one PPD, "You can start thinking of me as a serious



Racing promotes comaraderie as well as encouraging pilot skill.

competitor when I stop calling this a 'trip' and start calling it a 'race'." And from another pilot in California, we heard, "By the time I'd flown across this continent twice (first on the race and then to get back home) without my husband in the airplane, I knew I was a pilot."

Future of Air Racing.

The future of air racing depends on you. Races need support from a number of different directions. Of course they need contestants; they also need funding. In addition, they need hordes of volunteer workers, not only those who plan the routes, but lots of people to man the stops, arrange lodging, work with airport personnel, time fly-bys, arrange pre and post-race festivities and all the myriad other little details like food and transportation and weather services, etc. that all become a part of the big event. Why don't you become a part of the big event? Get involved. You'll love it. You'll become a better pilot and, win or lose, you'll be making friends and memories that will last a lifetime...



A lot of time is spent waiting—for official sunrise. VFR weather, better winds......



Race stops are always busy with planes arriving, refueling and departing. Ground crews are vital to the success of a race.

CALL



Dear Licensed Pilot

On talking it over among ourselves and the other pilots whom we already know personally, it seems that the women pilots in this country should have some sort of an organization-our own QB, Early Birds, or NAPA.

It need not be a tremendously official sort of an organization, just a way to get acquainted, to discuss the prospects for women pilots from both a sports and a breadwinning point of view, and to tip each other off on what's going on in the

We would not need a lot of officers and red-tape machinery. It seems to us that a secretary to keep the records and report our activities to those key-points where they will be helpful in keeping in touch with openings, and a chairman to preside would be all that we need in the way of officers.

We might better also have a little constitution, brief, simple, and not too ironclad. Then we need a name and a pin. Attached is a tentative suggested constitution. Look it over and append any suggestions which may occur to you.

Could you attend an organization meeting on November second, around three o'clock in the afternoon, at Curtis Field, Valley Stream, L.I. Come in plenty of time to meet and have dinner at the field at 6:30. If the problem of getting from New York to Valley Stream bothers you, a couple of us have cars and have put our phone numbers down beside our names.

Please write and say: Yes, coming; or-No, not coming-attaching your additions, etc., to the tentative constitution. Several pilots with whom we have talked are planning to fly in. We're not particular whether you come by train, by automobile, or on two legs, or just by mail. But we do hope you'll put in some kind of an appearance at the organization meeting of licensed women pilots.

Sincerely yours,

Address reply to: Fay Gillis Secretary Pro Tem 27 W. 57 St., N.Y.C Teva Paris - Harte Chy 1341 J



License #6945



Fay Gillis Wells License #9497

to the COLORS Frances Harrell Marsalis License #7346

Most of you know that the Ninety-Nines were organized in 1929 and that Amelia Earhart was our first President. We thought you might like to see the "call-to-the-colors" letter that brought responses from 99 licensed women pilots.

Neva Paris

License #5073

Glenn Buffington provided us with a copy of the letter, which came from the files of charterite Jean Davis Hoyt. He notes that Jean was among the 26 who attended the first meeting, and along with Amelia Earhart, suggested using the number of Charter Members as the association name.

Shown here, from the collection of Glenn Buffingon, are the four women who signed the original letter. The picture of Margery Brown was one she sent to him a few years ago from Tokyo. On the back, she noted the picture, in a Cuban helmet, was taken in Havana. The picture of Neva Paris was originally from a Los Angeles paper during the '29 Derby. Pictures of her are scarce as she was with us such a short time. This one recently came into Glenn's collection from Charter Member Vera Dawn Walker.

We have many additional pictures of

Charter Members at Ninety-Nine Headquarters which we invite you to examine when you visit. We are hoping to someday have one of each of the original 99s suitably mounted in a permanent scrapbook. We also have some of Amelia Earhart's scrapbooks which contain much memorabilia from the early years of the organization, including a copy of the "call-to-thecolors". We intend to give you a glimpse into one of these fascinating books in one of the next issues of the 99 NEWS.

Would You Like To Be a 99?

To become a member of the Ninety-Nines, a woman must have at least a private pilot license and be sponsored by a current member of the Ninety-Nines. Student pilots are welcome to attend meetings and get acquainted.

If you would like additional information on the Ninety-Nines or would like to meet Ninety-Nines in your local area and attend their chapter meetings, please fill out the form below and send it to Ninety-Nine Headquarters.

Request for Information	
Name	
Address	
Home Phone Bus. Phone	
Please indicate your aviation experience:	
Student Private Commercial	ATP
Airplane Helicopter Jet	
Additional Ratings:	
Additional Katings.	
Comments:	
Return to:	
The Ninety-Nines, Inc.	
P.O. Box 59965	
Will Rogers World Airport Oklahoma City, OK 73159	

Introducing the USAIG ALL-CLEAR 360° Aircraft Policy



Clearly written in everyday English Clearly broadened all-around coverage

That's the revolutionary approach USAIG has taken with our all-new ALL-CLEAR 360° aircraft insurance policy. It spells out—in plain English—exactly what coverage you have and gives you more coverage than ever before.

When you read the ALL-CLEAR policy you understand every word. Each sentence comes across clearly and simply with no hidden meanings or confusing language.

But we didn't stop with language alone. We also added more coverage to give you more for your insurance dollar.

A brochure describing our ALL-CLEAR policy in more detail is free for the asking. Simply complete a Reader Service Card or write to: USAIG, Advertising Dept., 110 William Street, New York, New York 10038.



NEW YORK • ATLANTA • BOSTON • CHICAGO • DALLAS • DENVER HOUSTON • LOS ANGELES • SAN FRANCISCO • TOLEDO • WICHITA