

THE STORY OF LOCKHEED VEGA - NR-496M

by

Gregory C. Kohn

In an effort to compliment and correct the synopsis on the life history of Lockheed Vega NR-496M, as listed on page 16, of the January - March 1957 issue of the AAHS Journal, I would like to add the results of research on this airplane which took place over a ten year period.

During its flying life this Vega had only two owners. It was originally purchased by William S. Brock and Edward F. Schlee, who in turn sold the plane to Powell Crosley, President of the Crosley Radio Corporation of Cincinnati, Ohio. Crosley then loaned the Vega to Ruth Nichols who had it until the last flight.

Because of the many modifications required for record flight attempts this Vega appeared in four distinct versions, each serving a specific purpose. In addition to several minor accidents, it suffered three major crackups with near fatal results for the pilot each time. This aircraft became the first airplane in the history of aviation to have to its credit three Official Maximum Inter-national Records namely; altitude, speed and long distance. During its flying career it was known by three different names; "THE NEW CINCINNATI", "THE CROSLY RADIO PLANE" (also at times "The Crosley Radio Ship"), and finally "AKITA", the name it carried thru its final flight.

SCHLEE and BROCK OWNERSHIP

Lockheed Vega NR-496M was originally purchased by Edward F. Schlee and William S. Brock, Detroit, Michigan distributors for the Lockheed Aircraft Corporation, who began to prepare the airplane for a secret flight. According to a news item in the New York Times dated May 10, 1930 a series of test flights were being conducted with the plane at Columbus, Ohio. The Vega, powered by a 420 HP. Pratt & Whitney Wasp engine, was reported to be equipped with additional fuel tanks giving a fuel capacity of 800 gallons, and a range of 5000 miles. Billy Brock, who was testing the plane, also added a radio receiver, but would not give any information as to the ultimate purpose of the secret preparations.

The object of the secret tests were revealed shortly when Brock and Schlee left Detroit, where the plane had been taken for installation of additional equipment, for Jacksonville, Florida. On June 18, 1930 the fliers left Jacksonville for a non-stop flight to San Diego, California. They arrived there in 13 hours and 55 minutes. (Wide World Photo of the Vega landing at San Diego, on page 6xx of the New York Times for 6-29-30). They immediately filled the empty gasoline tanks and started on the return trip to Jacksonville in the face of headwinds and severe electrical storms. A stop was made at Tallulah, Louisiana for more fuel and they proceeded on to their goal arriving there in 16 hours and 50 minutes. The total elapsed time for the round trip flight was 31 hours and 58 minutes, breaking the existing record between these points by a little more than seven hours. Jimmy Doolittle set this record in 1922. The reasons behind the secrecy in preparing for the attack on this old record became apparent immediately. They did not want anyone else to beat them to it.

While landing at the Jacksonville Municipal airport, about twelve miles beyond the finishing line, which had been crossed a few minutes earlier, the plane ran out of gas. Due to extreme fatigue, Brock lost control of the plane during the landing and it crashed into a boundry fence. Brock and Schlee escaped injury, but the Vega was severely damaged.

With a new record to their credit Brock and Schlee shipped the Vega back to Detroit where it was repaired and put back in flying shape again. Billy Brock entered the Vega in the "Mens non-stop Derby" from Los Angeles to Chicago, one of the featured races on the schedule of the 1930 National Air Races. The races held between August 23rd and September 1st saw Billy Brock come in fourth in a field of five.

Billy Brock also flew the Vega during the races and made air to ground broadcasts from the plane over Station "KHILO". A radio transmitter had been installed in the Vega by the Crosley Radio Corporation of Cincinnati, Ohio for this purpose. This transmitter had a power of only 150 Watts. The Vega became known as the Crosley Radio Plane, a name later applied to the airplane. It was about the time of the 1930 National Air Races that the Vega became the property of Powel Crosley.

COLOR SCHEME:

The original color scheme of the airplane applied at the Lockheed factory was as follows: fuselage, fin & rudder, and landing gear struts were red. The wings, horizontal stabilizer and elevators, and the wheel pants were cream. The registration numbers on the rudder and the arrow tipped stripe on both sides of the engine cowl and fuselage were cream, and the registration numbers on the wings were red. The usual Detroit Aircraft Lockheed insignia appeared on both sides of the fin in gold.

"THE NEW CINCINNATI"

After Powel Crosley bought the Vega he named it "The New Cincinnati", and had this name painted on both sides of the nose cowl in cream letters edged in black. The two record flights by "Wm. A. Brock - Jacksonville to San Diego in 13 Hrs. 55 Min.", and "San Diego to Jacksonville in 16 Hrs. 50 Min." were painted in small letters on the left side of the nose cowl just above the arrow head on the fuselage stripe. On both sides of the rudder, just below the registration numbers were painted "STATION 'KHILO'". The name CROSLY was painted on both sides of the fuselage in red letters edged in black, and centered over the cream fuselage stripe between the last window and the leading edge of the horizontal stabilizer.

Shortly after the 1930 National Air Races, Ruth Nichols convinced Powel Crosley to let her use his Vega with the idea of setting up new flight records to advertize the Crosley Radio Corporation. With the Vega in her possession, Miss Nichols decided that inasmuch as she was returning to New York with the plane, she would set the first record with an intercity speed flight between Cincinnati, Ohio and New York City.

On November 20, 1930 Ruth Nichols lifted the Vega from Crosley's private airfield in Cincinnati and headed for New York. A short time later low clouds and ground fog forced her lower and lower until she was caught in a pocket between mountains forcing her to set the Vega down in a very rough field at Mann's Choice, Pa.. Due to the short field she ran through a fence and ended up with the plane

standing on it's nose with a bent cowling and damaged propeller. Two days later, after the bent prop had been repaired and remounted, she made a very hazardous take-off from the small field and flew on to New York. Although the first record flight attempt in the Vega was a failure, she was becoming adept at handling her now high powered steed, a prerequisite for her ambitious plans.

TRANSCONTINENTAL RECORD FLIGHTS

Under the guidance of her technical advisor, Clarence Chamberlin, Ruth promptly proceeded to set a new east-west transcontinental record flight for women on 12-1-30 by flying from New York to Los Angeles in 16 hours and 59 minutes 30 seconds. Refueling stops were made at Columbus, Ohio; Wichita, Kansas; Amarillo, Texas; and Kingman, Arizona. After a weeks rest in Los Angeles Miss Nichols left Burbank, California for a fast return flight to New York. She made one stop at Wichita, Kansas for fuel and completed the flight in 13 hours and 21 minutes 43 seconds, setting a new west-east transcontinental record for women. Although she surpassed Col. Charles Lindbergh's record time set a year earlier in his Lockheed Sirius, she failed to break Frank Hawks's record time set six months previous in his Travel-Air Mystery Ship "TEXACO No. 13".

ALTITUDE RECORD FLIGHT

With two new transcontinental records in the Vega to her credit. Ruth Nichols now planned an assault on the feminine altitude record. Clarence Chamberlin began to prepare the Vega for the altitude attempt by stripping every ounce of excess weight from the plane. Modifications were made to the landing gear, and Chamberlin designed wire braced landing gear, forerunner of the later Vega speed gear design, made its initial appearance on a Lockheed Vega. This landing gear consisted of thin streamline wires in place of the normal shock struts with a spreader wire to maintain normal wheel tread. Small airwheels replaced the normal Vega wheels, and afforded the only cushion for landing. This combination of thin center struts and wire bracing and airwheels gave only a very low 3:1 safety factor, but it resulted in a lot of added speed. A special 10'-6" diameter propeller was installed.

Another Chamberlin first utilized on the Vega for the altitude flight was the installation of an oxygen system for the Vega engine, and when fed straight oxygen at the peak of the climb, the engine developed enough additional horsepower so that an extra 500 feet of altitude was realized.

On March 6, 1931 Ruth Nichols climbed the Vega to an altitude of 28,743 feet over New Jersey and Officially set a new International Altitude Record for women.

COLOR SCHEME:

The color scheme of the Vega was not changed for the transcontinental or the altitude record flights. While the plane carried the name "THE NEW CINCINNATI" for the two transcontinental record flights, it no longer carried that name for the altitude flight. In its place had been printed "CROSLEY RADIO PLANE" - "STATION KHILO". The two transcontinental records were listed on the left side of the nose, under the heading "RECORDS BY RUTH NICHOLS" directly below the list of records by Wm. S. Brock. An outline map of the United States, showing the routes and stops of the two transcontinental flights, had been painted on the left side of the fuselage just aft of the landing gear strut fitting, and just below the cream trim stripe. This outline map was added prior to the altitude flight. All lettering was again cream edged in black. The outline map was painted on in black.

SPEED RECORD

Less than a month after establishing the new worlds altitude record, Ruth Nichols took the "CROSLEY RADIO PLANE", as it was now referred to, to Detroit, Michigan for an attempt to establish a new feminine speed record. The Vega once more was modified slightly to give the greatest amount of speed and thereby assure success in this new venture. The special 10'-6" propeller, installed for the altitude flight, was removed and the original propeller was reinstalled. A pair of small close fitting wheel pants and fairings were designed by Chamberlin and fabricated for use with the air wheels. Even the door handle and the tail skid shoe were removed because they offered unwanted drag. This streamlined landing gear increased the speed by close to 26 M.P.H.. The injection of pure oxygen into the engine carburetor, giving additional power for a short time, was again used for the two speed runs across the marked course.

On April 13, 1931 Ruth Nichols added her second International World Record to her growing list of accomplishments by flying the Vega over Carleton, Michigan's course at a speed of 210.65 miles per hour.

The only change of appearance in evidence on the Lockheed was the addition of the altitude record, to the list of records by Ruth Nichols, on the nose cowl of the airplane. The most noticeable change was the addition of the small wheel pants. These wheel pants were painted cream.

TRANSATLANTIC FLIGHT ATTEMPT

By this time Ruth Nichols felt that she was ready to make the first solo flight by a woman across the Atlantic ocean to Europe. Her target would be Paris. She secured permission from Powel Crosley to use his Lockheed Vega for the flight, and since further alterations were required for an over water flight, preparations began immediately.

Additional fuel tanks were installed in the wings and cabin to bring the total fuel capacity to 600 gallons. A 50 gallon oil tank became the pilots seat. The cockpit hatch was redesigned so that the complete hatch could be released quickly for ease of exit. The standard Vega landing gear was reinstalled, and all of the windows and frames with the exception of the one in the door were removed and the window openings covered with fabric. The entire airplane was then repainted for the first time for glamorizing purposes.

COLOR SCHEME:

The new color scheme chosen for the transatlantic flight was white and gold, and appeared as follows: The fuselage, fin & rudder and landing gear struts were all white. The wings, horizontal stabilizer & elevators were gold. A thin gold stripe starting just aft of the nose cowl on the top and bottom of the fuselage blended into a single stripe just before the landing gear strut, and ran the full length of the fuselage. The records by Wm. S. Brock were printed in gold letters on the left side of the fuselage, above the trim stripe and just aft of the landing gear strut. The records by Ruth Nichols appeared in line and directly below the trim stripe, also in gold lettering. The registration numbers appeared in gold on the rudder, while the lettering CROSLEY RADIO SHIP - CINCINNATI, OHIO appeared on both sides of the fin in gold. The name CROSLEY was edged in black to indicate depth. The registration numbers on the wings were black. The name CROSLEY RADIO SHIP was painted on both sides of the nose cowl in gold, and again as on the fin, the name CROSLEY was edged in black.

The engine was completely overhauled by the Pratt & Whitney Company. At that time the factory installed a blower, high compression pistons, a larger carburetor taken from a Pratt & Whitney "Hornet-B", quite unusual to add to a Wasp engine, and gears for a controllable pitch propeller. The power of the engine was boosted to 550 Horsepower, a gain of 130 H.P. The Hamilton Standard Propeller Company furnished gratis, the first controllable pitch propeller to be used outside of the Hamilton factory, and it was installed. The instrument panel was redesigned several times to take new instruments installed for the transatlantic flight attempt. After numerous flight tests the plane was ready for the transatlantic trial.

With all the flight tests now completed, the special speed landing gear, designed for the altitude and speed flights, was now reinstalled. This landing gear had been further improved. A small light shock absorber had been incorporated into the top of each of the four small center struts giving a bit more shock resistance for the plane. The small airwheels and special wheel pants were reinstalled. These wheel pants, unlike any ever seen on a Vega, were now painted white with gold stripes around the leading edge.

A new name, "AKITA", a South Dakota Indian word meaning "to explore", was given to the Lockheed, and it was painted in gold diagonally across the left side of the nose cowl in "Black Letter", or what is sometimes referred to as "Gothic" style letters, replacing the words CROSLEY RADIO SHIP. A two inch wide gold band was painted completely around, and one inch forward of the trailing edge of the nose cowl. Below the cockpit, on both sides of the fuselage, was painted the legend THIS SHIP IS LOANED TO MISS RUTH NICHOLS BY THE CROSLEY RADIO CORP. in gold letters edged in black. The Lockheed insignia was added to the fin with the lettering REBUILT BY CHAMBERLIN appearing directly above it. "AKITA" was now ready to fly to Europe.

During the last week in June the weather reports seemed ideal and the start should be made at once for the atlantic crossing. Accordingly, it was decided that the plane and ground equipment should be moved from Chamberlin's Hangar at the Jersey City Airport to Floyd Bennett Field in New York, where paved runways would make a takeoff in a heavily loaded plane less hazardous. Therefore, the Vega, its cabin already loaded with fuel tanks, was loaded down with tools, welding tanks, and other ground equipment necessary for repairs. With this load in the rear of the cabin, the center of gravity was shifted to the point where the takeoff from the small field at New Jersey almost spelled finish to the plane. The ensuing landing at Floyd Bennett field on June 19, 1931, a very hot day, with the heavy load of equipment, caused Miss Nichols to drop the Vega on one wheel of the light landing gear. The added strain caused the main fuselage bulkhead to crack. Time was short if advantage was to be taken of the good weather over the Atlantic. To repair the damaged bulkhead meant that the cabin tanks would have to be removed from the fuselage, and new fittings fabricated and installed. It looked rather hopeless, but Ruth Nichols luck was with her when the Officer in charge of the United States Navy hangar offered the Navy facilities for the repair. The Navy crew and Clarence Chamberlin worked round the clock and in short order the Vega was once more ready to go.

At 3:30 P.M. on June 21, 1931, Ruth Nichols gunned the Vega down the runway of Floyd Bennett Field and headed for St. Johns, New Brunswick, the first leg of her journey. Although she had never seen the airfield at St. Johns, she had been informed that the field was satisfactory. This was true had she been flying a standard Vega, but as it was "AKITA" was far from standard, and was very tricky to handle. In her letter of 10-23-46 Miss Nichols wrote; "I cracked up in St. Johns, New Brunswick, about 6:00 o'clock that same evening due to the airport being too small for a

plane of that weight and horsepower. If a glaring setting sun had not blinded my landing, I might have been able to get away with a cracked airplane instead of a cracked spine."

While attempting to land "Akita" on the short runway at St. Johns, Ruth Nichols got the wheels on the ground and rolled fast towards a cliff at the far end of the runway. Seeing that she could not possibly stop the fast moving plane, nor safely groundloop it without again wrecking the landing gear and the fuselage bulkhead, she applied full power and pulled up over the edge of the cliff at near stalling speed. "Akita" strained over the trees at the edge of the cliff, but dropped slightly and dragged her tail thru another set of trees beyond. This caused the plane to lose the little flying speed it had left and it stalled, dropped, and squashed flat onto the ground.

The Vega suffered badly, although its pilot suffered worse. The landing gear collapsed dropping "Akita" on her belly, splitting the fuel and oil tanks wide open. The engine had broken loose and folding under collapsed the entire front end and bottom of the fuselage. Neither wing tip had touched the ground, and the tail perched high in flying position, was undamaged. Both pilot and plane were now out of commission.

LONG DISTANCE RECORD FLIGHT

While Miss Nichols recuperated from the St. Johns crackup, the Vega was returned to Chamberlin's hangar and reconstruction began immediately. A scarce used Vega fuselage was found and purchased to replace the original one which was damaged beyond repair. Since the plane had been heavily insured, this fact helped in the financing and, along with the added assistance of Miss Nichols' Manager, Captain H.H. Railey, who was able to obtain certain additional funds, the work progressed without interruption. By late fall of 1931 "Akita" was once more in flying shape. Still encased in a plaster cast from below her shoulders to her hips, Ruth Nichols flew it leisurely out to California.

The Vega at this time was mounted on its standard Vega landing gear. The wing had been altered to incorporate balanced ailerons for added control. It looked resplendent in the second white and gold paint design.

COLOR SCHEME

The new paint design, although still basically white and gold, was quite different from the previous one. A wide gold stripe edged in black ran the full length of the fuselage curving over and under the nose cowl. The large standard wheel pants were similarly painted. The name "AKITA" again appeared, in gold edged in black, on the left side of the nose cowl, but it was changed from the diagonal to the horizontal position parallel to the line of thrust. All windows and frames were painted over with the exception of the last window on each side of the fuselage. The list of record flights by Wm. S. Brock were lettered in gold on the first window on the left side of the fuselage only, while the list of record flights by Ruth Nichols were lettered in gold on the second window, also on the left side of the fuselage only. The lettering CROSLEY RADIO CORP. was painted on both sides of the fin above the standard gold Lockheed Insignia in gold edged in black. Immediately above the Lockheed insignia, in gold letters, was printed REBUILT BY CHAMBERLIN. Below the cockpit window was painted AMOCO PRODUCTS USED EXCLUSIVELY, also in gold. The letters AMOCO, only were edged in black. The registration numbers on the rudder

were painted gold with red edging. The registration numbers on the wings were red with black edging.

The engine had been further supercharged so that it now developed almost 600 horsepower. New navigational instruments were added and the instrument panel was rearranged. The Hamilton Standard Controllable pitch propeller, having been repaired was remounted.

On Oct. 23, 1931 Ruth Nichols flew from Burbank, California to Louisville, Kentucky nonstop establishing a new women's world record for Long distance flight at 1977 miles. The flight involved approximately 14 hours solo flying, 12 in darkness and 8 over 15,000 feet. This was her third International record earned in Vega NR-496M.

The day after the California to Louisville flight had been completed, and while running up the engine prior to takeoff, "Akita" caught fire when the exhaust flames ignited fuel leaking from a dump valve on the bottom of the fuselage. Miss Nichols escaped unhurt, but the Vega was reduced to a burned out wreck. In her haste to get out of the cockpit she switched off only one magneto. This error kept the engine running and thereby blowing the flames away from the cockpit allowing her time to get on top of the wing and escape off of the wing tip. The engine was finally shut off when, at Miss Nichols command, a fire hose was pointed at the air intake, and a stream of water choked off the air supply to the carburetor. Another six months of financing and rebuilding were required before the Vega could again be put back into flying condition.

SUNKEN WING VEGA

After convincing Powel Crosley that the plane could be put back into flying condition for another attempt at the transatlantic flight, he finally gave Ruth Nichols his consent to go ahead with the plans she now had in mind. The "Life Saver Corporation", of Port Chester, New York contributed generously toward the cost of rebuilding the plane and, with the financial help of several of her friends, she once more saw her beloved airplane on the road to recovery.

With the problems of financing settled, Ruth Nichols and Clarence Chamberlin went into a huddle from which emerged the final design of the Vega. Due to the near tragic results of the St. Johns crash landing, it was decided to rebuild the Vega putting the cockpit behind the huge cabin fuel tanks. In the event of another crack-up, which had to be allowed for, the entire weight of the fuel and airplane could not trap the pilot between the airplane and the engine. Miss Nichols procured a fuselage and tail assembly from a used Lockheed Air Express for the new version of Akita.

Knowing that her plans to make the transatlantic flight were progressing again, and having full confidence that Chamberlin would have the plane ready to go, Miss Nichols decided to go to Europe for a short vacation and to survey the coasts of Ireland, England and France so that she would be able to recognize landmarks as she approached her landfall after the ocean crossing. With a borrowed airplane she accomplished her plan, and at the same time got the much needed rest during the ocean voyage on board an ocean liner.

Upon returning to the United States she discovered that due to the high cost of the rear cockpit conversion, Chamberlin had used their alternate plan and was

rebuilding "Akita" into the "Sunken Wing Version". Another used Vega fuselage had been found, and the work was in progress.

Although disappointed that her original plans for the airplane did not materialize, she had faith in Chamberlin's judgment and agreed to his decision. Thereupon emerged the first and only "Sunken Wing Vega", sometimes referred to as a "Shoulder Wing Vega". This was accomplished by undercutting a standard Vega fuselage 1 1/4 inches, bringing the wing closer to the line of thrust. The pilots head would now be well above the top surface of the wing giving excellent 360 degree visibility. A removable, braced, "Bubble type" hatch provided cabin comfort for the pilot.

In her letter of 6-5-47 Miss Nichols wrote as follows: "We have always referred to this modification as a "Sunken Wing Vega". The purpose of this design was to insure better visibility, a faster means of emergency exit, and a better line of thrust".

In order to obtain greater leverage in the rear of the center of gravity, the rudder and fin, stabilizers and elevators from the Lockheed Air Express were used. This tail group was somewhat greater in area over the standard Vega tail group.

A novel idea worked out by Chamberlin and Nichols was a wood belly skid attached to the fuselage behind the engine and extending all the way through the bottom center of the fuselage, terminating at the rear of the cabin. The plane was to be landed on this skid after dropping the landing gear on takeoff. A standard Vega landing gear was used and was rigged so that it could be released from the cockpit.

The belly skid idea was adopted in lieu of the former wire braced speed gear that was used for the first transatlantic flight attempt, and which was basically the cause of a lot of the difficulties encountered with the Vega. Since a landing gear on a long distance airplane was used primarily for takeoff, and from there on it would only cause loss of speed and also cause the consumption of precious fuel with a resultant loss of range, it was decided that, after doing its initial job, it was no longer required. It would be advantageous if it could be eliminated. The only problem remaining was the eventual landing when the destination was reached. Since the airplane would be flying over the open ocean a wheel landing gear would be useless, if not hazardous in the event of a forced landing on the sea, and once the objective would be reached it would matter little if the plane was damaged somewhat on landing. The problem, therefore, resolved itself into devising a means to effect a safe landing without an undercarriage, with a minimum, if any, damage to the aircraft. Thus the belly skid idea was born.

NOTE:

The belly skid idea is a Chamberlin-Nichols original. It was later adopted by Harold Bromley on his Diesel Powered Vega c/n 28, to be used for his projected Pacific flight to Japan from California, and still later by Wiley Post on his "Winnie Mae" c/n 122 for his transcontinental stratosphere flight attempts. Post was the only one of the three to actually make use of this installation in February 1935, and again in March 1935 sustaining only a bent propeller each time.

A swivel tail wheel was installed on the Vega in place of the standard tail skid and the Hamilton Standard Controllable pitch propeller, fortunately not damaged in the Louisville fire, was again mounted. For the third time the white and gold color scheme was adopted.

COLOR SCHEME:

The fuselage, rudder and fin, and the landing gear struts including the wheel pants were white. The fuselage and wheel pant trim stripes were gold with red edging. The trim design was identical to that used on the plane during the flight from California to Louisville with two exceptions. The fuselage stripe was much thinner as it met the horizontal stabilizer and, the trim stripes on the wheel pants terminated at about the 75% point of the length of the pant. The wing and horizontal stabilizer and elevators were gold. The registration numbers on the rudder were gold edged in red. The registration numbers on the wing were black edged in red.

The list of flight records by Wm. S. Brock appeared in gold letters above the fuselage stripe on the left side of the fuselage, while the list of records by Ruth Nichols appeared, also in gold lettering, below the stripe. The Life Saver trademark was painted on each side of the nose cowl in gold. A red disk was painted in the center of the trademark and a gold wing flared from the disk. Below the cockpit, on the left side of the fuselage in gold lettering appeared the legend LOANED TO RUTH NICHOLS-COURTESY OF-CROSLEY RADIO CORP.. The name of the principle backer, THE LIFE SAVER CORP. THE CANDY WITH THE HOLE, was printed on the sides of the fuselage in gold letters. This legend split the fuselage trim stripe midway between the trailing edge of the wing and the leading edge of the stabilizer.

On each side of the fin, also in gold lettering, appeared the following; LIFE SAVERS CORP. - THE CANDY WITH THE HOLE - PORT CHESTER, NEW YORK. Directly below this lettering appeared the standard Lockheed insignia and just above this insignia was printed REBUILT BY CHAMBERLIN. Again the color gold was used for both items.

The faces of the propeller blades were painted anti-glare black from the tips to within 12" of the propeller hub.

All windows and window frames, with the exception of the last one on each side of the fuselage had been removed, the openings plugged and covered with fabric prior to painting. The door was not sealed.

Although the Vega was ready to go, the season for flights across the Atlantic was almost over. Again disappointed, but undaunted, Ruth Nichols made new plans to justify the confidence her Sponsors had in her ability. She now planned to use the plane to make the first women's solo nonstop flight from New York to California, and then to make the first solo flight from Hawaii to the United States across the Pacific ocean. She planned to fly nonstop to California, put the Vega on board ship to the Hawaiian Islands, and then fly it back to California, just as Amelia Earhart did several years later. She planned to drop the landing gear from the plane after takeoff from Honolulu.

NEW YORK TO LOS ANGELES FLIGHT ATTEMPT

Inasmuch as the campaign for the presidential election of 1932 was underway, a last minute arrangement was made whereby Republican "Vote For Hoover" election literature would be carried and dropped during the transcontinental flight. In return the Republican Party of the United States agreed to pay all the expenses incurred during the flight to Los Angeles. This last minute financial aid was not to be turned down, and so the ship was loaded with election pamphlets.

Before leaving New York one minor change was decided upon in order to take

advantage of an already efficient airplane. The swivel tail wheel was removed and in its place the original tail skid was reinstalled. The shoe was also removed from the tail skid stem since it would offer resistance that would cost her several miles per hour in speed. This last attempt to gain ultimate performance from her aircraft caused the final destructive force for her beloved "Akita".

Heavily loaded with fuel and Republican election literature, Ruth Nichols started the Vega down the runway at Floyd Bennett Field on the wet, damp morning of November 4, 1931 for the start of the nonstop flight to Los Angeles. As the plane surged forward the nose started to swing to the right. An attempt to straighten it out with left rudder and brake failed to stop the impending ground loop. With no alternative in sight Ruth Nichols jammed on both wheel brakes hoping to control the wild swing of the heavy plane, but it was too late. The momentum of the aircraft caused the braked wheels to slide on the wet runway, and the Vega slid sideways towards the edge of the paved runway. A wheel caught in the mud at the edge of the pavement, and the heavily loaded plane stopped suddenly when the wheel dug into the soft turf. The momentum of the plane collapsed the landing gear on the left side. The left wing dropped and dug into the ground. The sudden impact split the fuselage and fuel tanks leaving the Vega lying badly broken in an ever widening pool of gasoline.

An investigation showed that the tail skid stem, having been turned to the right as a result of the final turn into the wind, did not return to the center position. This was probably caused by the great weight in the tail of the plane. The off center skid stem caused the Vega to turn to the right as the power was applied, and Ruth Nichols was unable to stop the resultant crackup.

The Vega fuselage was wrecked for the third time, and required replacement if the flight was to be resumed. The wing was damaged and fuel tanks were split wide open. Although many attempts were made to acquire the necessary funds to rebuild the plane again, Ruth Nichols did not have much luck. In her letter of 10-23-46 Miss Nichols wrote as follows: "This time I fortunately did not suffer any physical mishap, but the plane was so severely damaged that I found it too difficult to obtain the needed funds for its repair. By the end of that winter (1931) so many over-ocean flights had been completed that it was no longer "news" and therefore it seemed best to give up that project".

AVIAMENT CORPORATION

Since the money to rebuild the Vega was not forthcoming, the remains of "Akita" were put into storage for several years through the generosity of "Speed" Hanzlik and Frank Ambrose, both in Flushing, New York. It was around this time that ownership of Vega c/n 619 - NR-496M passed from Powel Crosley to the Aviament Corporation.

Although details that lead to the transfer of ownership are vague, and no doubt confidential, it must suffice to assume that, since the Lockheed Aircraft Corp. lists the Aviament Corporation as the last owner of the plane, it is true. The exact date of transfer is unknown but falls sometime shortly after Nov. 4, 1931, the date of the final crackup.

The Aviament Corporation was an organization formed for the purpose of Aeronautical Research. Clarence Chamberlin was one of the major stock holders of the organization, and no doubt knows much of the history of its activities.

The remains of "Akita" and the Air Express fuselage, left over from the last rebuilding effort, finally disintegrated with age and dry rot, and according to Miss Nichols was supposed to have been used for firewood. How long these parts remained in storage before they were destroyed is unknown. However, some parts of the Vega were rescued and Miss Nichols has at this time the rudder and one wheel from the Sunken Wing Vega, along with some struts and a few odd parts. The engine was given to one of her most loyal mechanics, Hal Person, in return for the many countless hours of his time spent over many months readying the Wasp on former flights. The Hamilton Standard Controlable pitch propeller, the second to be built and the first to be used outside of the Hamilton factory, was donated to the Smithsonian Institution in Washington D.C. where it rests today, the only public evidence of the existence of Vega NR-496M. Thus came the end of a great and valiant airplane.

In the final analysis the only parts of the original Vega "The New Cincinnati" remaining as component parts of the "Sunken Wing Vega" were parts of the landing gear, the wheel pants, some instruments and the wing.

Although the Vega came to an undeserved end, it did nevertheless prove to be a thoroughbred in its class. Through the generosity of Powel Crosley who gave his airplane to the cause, the many people who supplied the needed money to make the flights possible, Ruth Nichols who risked her life and fortune, and Clarence Chamberlin who contributed his time and knowledge, this Lockheed Vega became the first airplane in the history of aviation to hold to its credit three International Maximum Records namely, the Worlds Altitude, Speed and Long Distance records for Women. This achievement, therefore, stands as a monument to this great airplane.

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Aero Digest

Aviation

Letters from Ruth Nichols dated 10-23-46, 11-12-46, 12-2-46, 2-8-47, 2-23-47, 6-5-47, 7-21-47, 3-1-52, 3-31-52, 2-26-58, 3-5-58, 3-17-58 and 4-7-58. Final letters of approval and authorization to publish on 7-22-58 and 8-22-58.

Letters from G. C. Young, Director of Advertising of Beech Nut Life Savers Inc. dated 4-6-56 and 2-7-58.

Ruth Nichols new book "Wings For Life" published 1957 by J. B. Lippincott Co. Philadelphia, Pa. and New York.

Ruth Nichols personal photograph collection.

Authors photograph collection.

Journal of the American Aviation Historical Society for January to March 1957.