

The SIKORSKY S-39

"A very good airplane at a very bad time..."



This rare photograph shows the only twin engined S-39, X-963M. It was ill-fated, for it crashed on its third flight within a week after completion in December 1929. Sikorsky abandoned the two-engine concept for this sport/executive airplane in the production models. (Photo - Sikorsky Aircraft Division of United Aircraft Corp.)

By MITCH MAYBORN



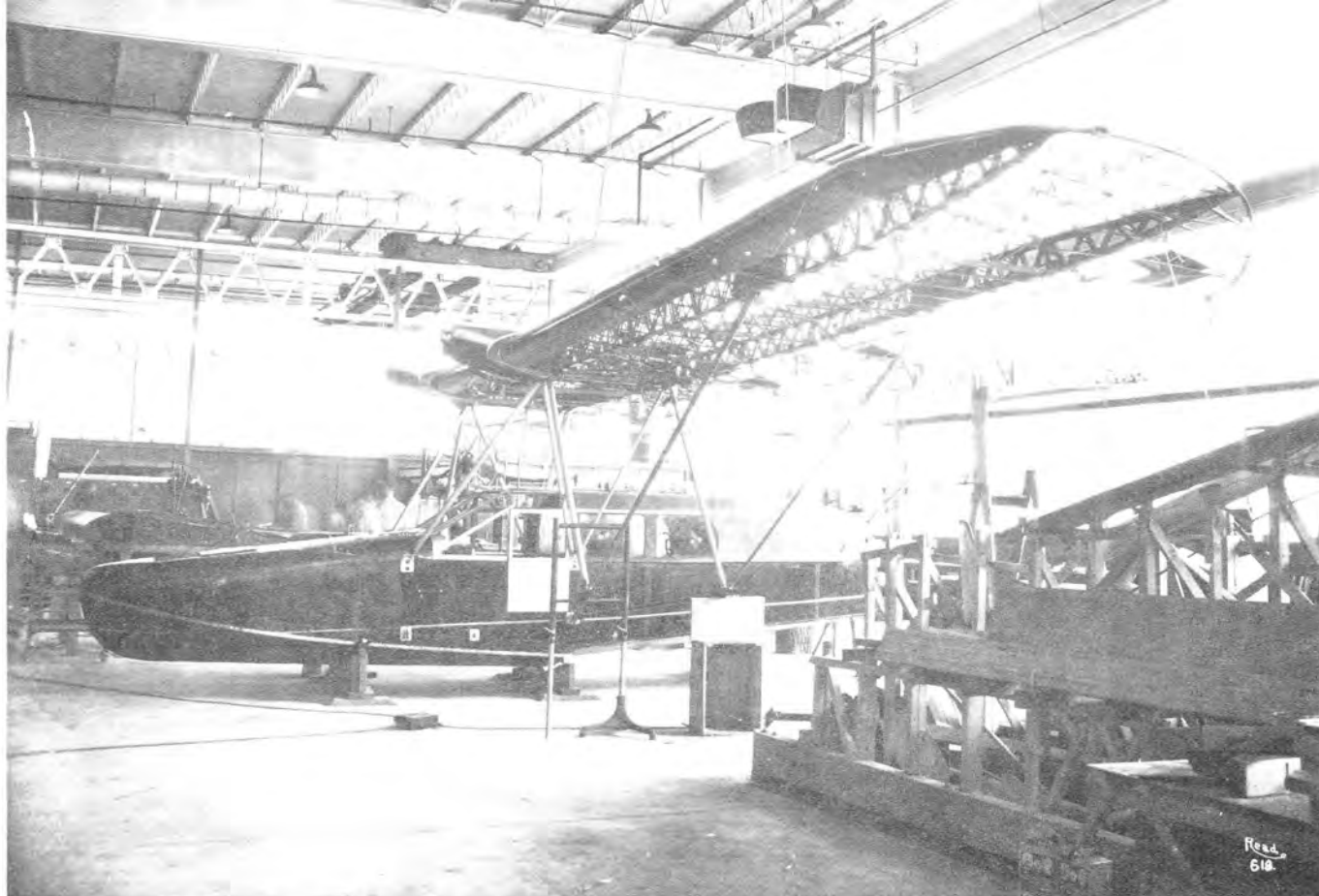
The prototype single-engine S-39, an altogether different airplane, was given the same registration number X-963M, and used the first P & W "Wasp Jr". It had twin vertical stabilizers, later revised to one. It flew in February 1930. (Photo - Sikorsky)

Following closely on the heels of Sikorsky's immensely successful S-38, Igor I. Sikorsky designed, for the sportsman or executive owner-pilot, the S-39. At first merely a reduced scale S-38, the S-39 forever remained a "little brother" in looks and use.

Family traits were common in Sikorsky's early amphibians, for the S-34, S-36, S-38, S-39 and even the 17-ton S-40 were of basically the same configuration, with a high wing, suspended fuselage and rudder-elevator assembly attached to the wings by outriggers.

The S-39 first flew on 24 December 1929 and it arrived at a very bad time, for the economics of the world were such that a man would be unlikely to run out and spend \$20,000 dollars on a new airplane. As William T. Larkins so aptly put it in the introduction to his book, *The Ford Story*, "A wave of distress selling, starting on 24 October 1929 and climaxing on the 28th, resulted in a 14 billion dollar loss on the New York Stock Exchange and plunged the United States into a depression that lasted through 1935." The S-39's first flight was just two months, to the day, after the big Wall Street crash. In spite of the fact that the S-39 was born at such a time as would prevent the production of more than 23 airplanes, prototypes included, the little amphibian established an enviable service record.

For example, an S-39 proved its reliability in more than 60,000 miles of exploratory flight in Africa with Martin Johnson. The same airplane later explored remote Borneo with Johnson and was lost while under tow following a heroic sea rescue under adverse conditions during World War II. Another S-39 explored Australia with Ward



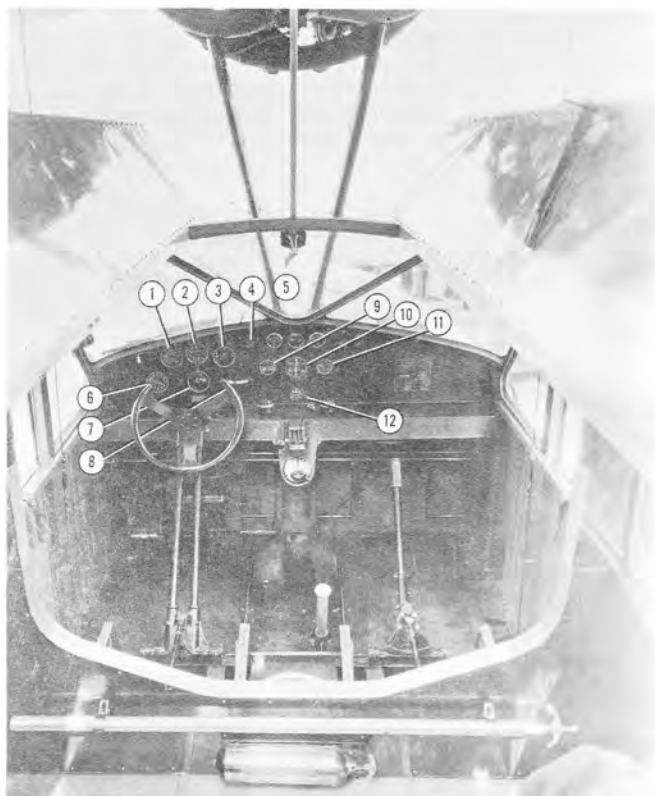
The original twin engined S-39 in construction. It had wooden hull frame with metal hull skin. The single step hull was divided into four watertight compartments. Entrance to the cabin was through a hatch that extended

the length of the cabin. Wings were metal framework, fabric covered, and were easily removable from the center-section. With wings removed the width was 18'-2". (Photo - Sikorsky)



The all-metal hull of the production S-39. (Sikorsky)

The final configuration of the S-39, X-963M, with single vertical stabilizer. Its landing gear used a long vertical shock strut to wing, revised in production models. (Photo - Sikorsky)



Interior of S-39 with pilot's seat removed. Instruments are 1. Airspeed, 2. Altimeter, 3. Climb indicator, 4. Light, 5. Fuel gauge, 6. Clock, 7. Compass, 8. Turn & Bank, 9. Oil pressure, 10. Tachometer, 11. Oil temp., 12. Air pressure for Haywood starter. (Photo - Sikorsky).



Williams and it, too, was damaged while making a similar rescue at sea during the War. And there are today two S-39's in existence, more than 30 years after they were built.

One S-39, piloted by Harry Richman held the International Altitude Record for Class C3 airplanes, with a high mark of 18,641.676 feet set 29 January 1935 and held until 14 April 1936. On 10 February 1935, with Harry Richman and George Daufkirch on board, the same S-39 set the International Speed Record for Class C3 airplanes over a 1000 kilometer (621 miles) course, with an average speed of 99,950 miles per hour. This record was held up until 9 May 1937.

Other sundry honors include the fact that the S-39 was the first plane mounted on a private yacht and was Igor Sikorsky's first all metal airplane. The prototype S-39 is the first airplane for which there was a full scale mock-up built prior to construction of the actual airplane. And the S-39 was Sikorsky's first airplane built in Connecticut.

But not all was glory for the S-39. The prototype crashed on its third flight, several were scrapped, one was made into a boat and one was smashed by a drunken fisherman.

WHY THE S-39?

Following the success of the twin S-38, Igor Sikorsky felt that a market existed for an amphibian, smaller than the S-38, which would interest the owner, pilot, sportsman and executive. This idea behind the smaller amphibian was sound. With underdeveloped airports, often far from cities, an amphibian would be ideal as landings could be made at existing airports or on any fairly straight stretch of open water. New York's East River was often used by Pratt & Whitney executives flying down from Connecticut in their S-38. The S-39 would do the same trick with more economy.

Further, at the time construction started on the S-39, the country was in the midst of roaring boom times and the sportsman-pilot was in his heyday. The S-39 with land/water capabilities was built for this type of man. In mid 1929 Igor Sikorsky made the decision to proceed, sketched out his design concepts, and turned them over to Boris P. Labensky to mold into an airplane.

ORIGINAL CONCEPT - the TWIN-ENGINE S-39

The airplane which grew out of Sikorsky's sketches under the hand of Boris Labensky, Michael Gluhareff and Michael Buiuid was a light twin-engine airplane following almost identical lines of the S-38. A disciple of

ABOUT THE AUTHORS

Mitch Mayborn is one of the earliest Members of this Society and has been of constant assistance to the Editor over the years. His major contributions to the JOURNAL qualify him as the "Sikorsky expert"; for instances, "The Sikorsky S-35 and the New York-Paris Attempt" (Vol. 3), and "The Ugly Duckling - Sikorsky S-38" (Vol. 4). This latter piece ranks among the best of the one-airplane type researches ever produced.

In the past year Mitch has served as a Founding Director and interim president of the newly formed Texas Aviation Historical Society, a gathering begun in the Dallas/Ft. Worth area by A.A.H.S. Members. He is currently on the editorial staff of two oil industry trade magazines but his enthusiasm for aviation history is unbounded.

Warren Eberspacher again provides a splendid example of member cooperative research. His drawing of the S-39 was produced after an exhaustive survey of documents and photographs with Mitch Mayborn. Warren also produced the drawing of the S-38 for the Volume 4, Number 3 JOURNAL (Fall, 1959) p.233.

multi-engine safety, Igor Sikorsky insisted upon two engines. British Cirrus "Hermes Mark I", 4-cylinder in-line, up-right engines of 115 take-off horsepower were selected and mounted on the wing.

Labensky, in charge of the development department with 39 people, had the major responsibility for the design and development of the twin-engine S-39. Using Igor Sikorsky's sketches and basic layout drawings, Michael Buiuid built, on his own initiative, the first full scale wooden mock-up in any aircraft construction. With this mock-up as a pattern and the layout drawings available, Labensky and his group fabricated the parts for the prototype with a minimum number of blueprints.

The fact that some 39 men worked on the S-39 during this period is one of life's little oddities.

The "twin" had wooden bulkheads, with duraluminum sheet covering the hull. Wings were constructed of duraluminum ribs, compression members and spar, then fabric covered. It also utilized Igor Sikorsky's "flying tail" principle for single engine safety of twin-engine aircraft, a principle previously used on Sikorsky's other amphibians. It worked like this...there was a lifting surface on the inboard surface of the vertical stabilizers which would aid the pilot in keeping a straight course with either engine out. This was used on the twin S-39 but of course was later dropped out of the Wasp, Jr. S-39 design as there was but the one vertical stabilizer.

UNITED AIRCRAFT'S ROLE IN THE S-39 DEVELOPMENT

While the first S-39 design was progressing, Sikorsky Aviation Corporation became a subsidiary of United Aircraft and Transport Corporation in 1929. United Aircraft policy was to have considerable effect upon Sikorsky operations in that United Aircraft equipment would be used in its aircraft designs as much as possible and top management decisions would be made at Hartford. This policy was to engulf the S-39.

Pratt and Whitney Aircraft Division of UATC was developing a small 300 HP air-cooled, radial engine named the Wasp, Jr., and the S-39 was selected as the first home for this new engine. Pressure was brought to bear upon a very reluctant Mr. Sikorsky to change the S-39 design to a single engine aircraft. When the loss of the twin S-39 later occurred, due to loss of power of one engine and its inability to maintain flight on the remaining engine, Sikorsky had lost his argument.

The twin S-39 was rolled out in mid-December 1929, and after completion of ground testing, flew for the first time on December 24th from the Curtiss-Wright airport at Stratford, Conn. It crashed on the 30th in its third flight.

Following the crash, work began immediately upon the single engine S-39. Like the twin S-39, the new prototype was of metal and wood construction but with ribs of inverted "hat" section with spacers used where trussing was riveted.

With P & W's "Wasp Jr." (c/n 6) installed, the all new S-39 prototype was ready for flight testing to begin by mid-February, 1930. Registration was X-963M, the same as the twin S-39, but there is no doubt that this was an entirely new airplane. In the week of February 10th several test flights had been carried out when the wing gave out with a loud groan and started to buckle in flight, forcing a quick termination of that day's work. In a letter to Igor Sikorsky, Jr., the pilot Boris Sergievsky wrote, "I have no information on the first S-39 except that during the first test flight I looped with it. In any event, the wing spar was reinforced and testing continued."

Further flight tests revealed that the S-39 was a reasonably satisfactory performer, though somewhat below expectations. Vibration and drag caused by the engine supports necessitated revision in the later production models. A new all metal hull with revised lines was designed and a general aerodynamic clean up was instituted.

Complete drawings and tooling were done at this time.

PRODUCTION OF THE S-39

Production commenced at a rather hectic time. The Sikorsky division was in the process of moving its plant from College Point, L. I. to a new factory at Stratford, Connecticut. The S-38 was in full production at College Point. Production of the S-39, hampered by the severe depression, and hindered by the scattered plant facilities slowly got underway in early 1930.

Once started, production went smoothly for the S-39 but sales were hard to obtain. Several other amphibians were on the market including the Keystone "Commuter" (Wright "Whirlwind" 300) and the Savoia-Marchetti S-56 (Kinner K5). The Keystone sold for \$17,500 but its performance did not match the S-39. The S-39, had been designed as a large quantity production airplane with profit shown in numbers built, and when sales were slow in materializing, production was halted with the completion of the first 20 production models.

Sikorsky built its detail parts in sets of twenty. This meant that twenty complete sets of parts for the S-39 would be completed and stored, and a set taken out and assembled when an order was received. All engineering changes would be incorporated in the next batch of twenty parts. Jack Harkness related that the first production batch of twenty were authorized by top (UA) management. The S-39 looked so good and performed so well that Harkness, who was then Factory Manager, decided to manufacture an additional set of 20 parts without specific authority from the Head Office of United Aircraft. The work was needed to keep the shop going and it had been the practice in S-38 production to build up parts in batches as needed. Unfortunately, the Head Office decided to scrap the S-39 program on the basis of market conditions and the lower priced competing aircraft. Harkness was caught with 20 unauthorized sets of S-39 components about 60 per cent complete. These were ordered scrapped and Harkness was removed as Factory Manager.

With the end of the S-39 program, Sikorsky's labor force had to be reduced from 950 to 350. A list was posted each Friday at noon for a period of six weeks, letting employees go in units of 100. Oldtime Sikorsky hands hated the action but by 1932 economic conditions were such that there was no choice. There had been 180 engineers on the staff in 1930; there were none by the end of 1931. Five were later re-hired to work on the Navy's XSS-1 program.

S-39 CONSTRUCTION AND OPERATION

A description of the major components was taken from Description and Maintenance Manual, Sikorsky Models S-39B and Y1C-28, but it holds true for all S-39 versions as they were similar except for minor modifications.

LANDING GEAR. Any reference to the S-39 landing gear must of course begin as Sikorsky's Description and Maintenance Manual:

Do Not Land On Water With Wheels Down!

Do Not Land On Land With Wheels Up!

This might seem silly to a non-flying reader, but any pilot knows that the most obvious and elemental rule is the easiest to forget. Marshall Rising of Pratt & Whitney relates observing a wheels-down landing on Lake St. Catherine, Vermont. He said, "The S-39 made a beautiful approach and touchdown, then a great spray shot up and the ship went up on its nose. The right wing went under and the engine stopped. Slowly the plane fell back on an even keel and several badly shaken people clambered out on top of the hull, followed by one very red-faced pilot." In March 1931, Capt. Elliott made a wheels-up landing with the S-38, HAWAII, of Inter Island Airways, with no damage. See "The Ugly Duckling", JOURNAL of A.A.H.S., Vol. 4, No. 3, p. 172.

Early S-39 models were equipped with "balloon" wheels and the system proved to be unsatisfactory. These planes had no shock absorbers and relied upon the balloon tires to take up landing stresses. C. W. Deeds related that his first S-39 flight had been with one so equipped. The pilot was Bernard L. Whelan, then Chief Pilot for United Aircraft and Transport Corp. and later General Manager of Sikorsky Aircraft. Whelan and Deeds landed, promptly bounced back into the air with Whelan declaring, "I haven't bounced that high in 20 years".

The balloon tires were replaced with wide track tires and shock absorbers were installed. The wide tires made the S-39 taxi comfortably and were better for use on soft sand than standard tires.

The landing gear was hydraulically pumped up or down by hand, either wheel operating independently. After landing on water, the pilot could lower the gear together or singly for braking, maneuvering or beaching. There was no warning light or gear positioning system.

Lewis McClain, Chief Pratt & Whitney Test Pilot, who often flew Deed's S-39 (NC-803W) on transport duty for UATC executives, added that the "wheels-down on land/up on water" rule also applied to take-offs. Once he flew to Maine to fetch the wife of a company executive. In several take-off runs he was unable to gain flying speed, and could not determine the cause. Finally his lady passenger said, "Should the wheels be in the water?" Embarrassed he pulled the wheels up and made a standard take-off.

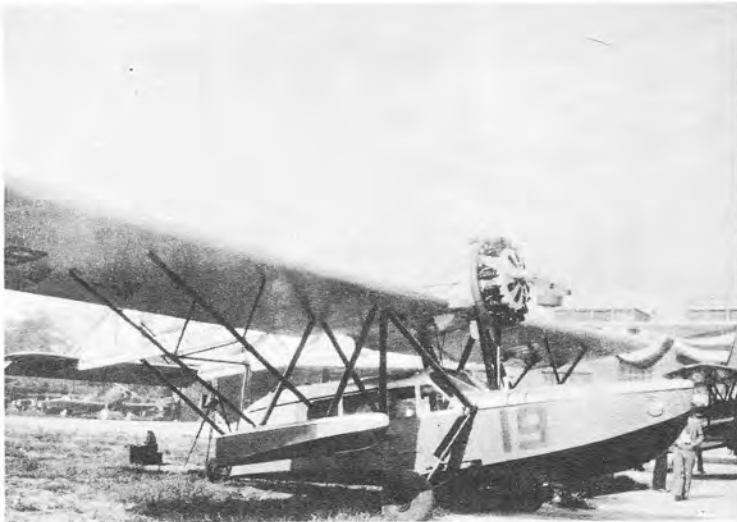
The tailwheel was steerable and was disconnected in flight by a clutch. In the water, the 18" x 3" tailwheel was effective as a rudder. A Sikorsky sales brochure from 1931 states that the main landing gear and tailwheel could be removed in 15 minutes, reducing weight by 200 pounds and making the S-39 a true flying boat.

POWERPLANT. The description of the S-39's power plant is best explained by Harvey Lippincott who gathered the following information.

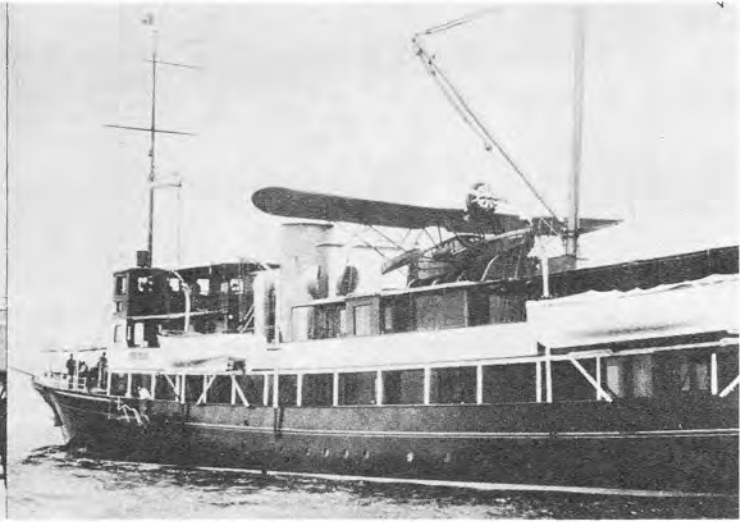
Production model S-39s were equipped with the Pratt & Whitney Wasp Junior series A engines. There were 23 "A" series engines shipped to Sikorsky including:

Wasp Jr. c/n 6, shipped 1/30/30 (installed in X-963M); c/n 15 and 16 (installed in NC-888W); c/n 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 35, 36, 37, 38, 39, 40, 41, 42, 43 and 52. No. 52 was probably a replacement engine for one damaged in a hangar fire which resulted in considerable damage to an S-39 when a mechanic's trouble light broke, igniting paint fumes and burning the fabric from the wings. Shipment of the above engines extended from 27 May to 20 October 1930.

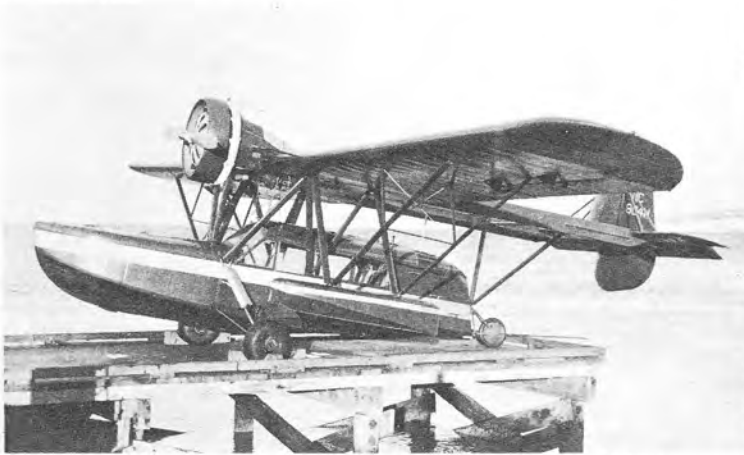
The most historic of the engines to power the S-39 was Wasp Jr. c/n 2. Built as an "A" series engine it became the first Wasp Jr. to fly when it was installed and flown in P & W's Vought O2U-1 in December 1929 with Lewis McClain as pilot. It had been widely rumored that No. 2 Wasp Jr. flew in Charles "Speed" Holman's Laird "Solution" which won the 1930 Thompson Trophy Race, but research by Lippincott proves that it did not fly in the Laird during the 1930 race although it did at a later date. McClain's logbook shows the engine still in the O2U two days before the race. It was shipped to Holman on 24 March 1931 and installed by Ray Peck of P & W, and flew in the Laird until replaced with a Wright J6. After removal from the Laird, it was installed in Lowell Bayles' Gee Bee (Model Z, Racing No. 4) which won the 1931 Thompson Trophy Race. In 1932 the engine was installed in Gee Bee Model R-2 (Racing No. 7) and flown by Lee Gelbach. Up to late 1932 this engine was the property of Pratt and Whitney and was loaned or rented to the users. On 14 November 1932 the engine was sold to Sikorsky after conversion from "A" series to an "S2A" series of 375 HP at 2300 RPM and installed in Martin Johnson's S-39 (c/n 914, NC-52V). This engine flew in the SPIRIT OF AFRICA, as Johnson's plane was named, for two years in Africa and on his expedition to Borneo. The airplane and engine (together the most historic of



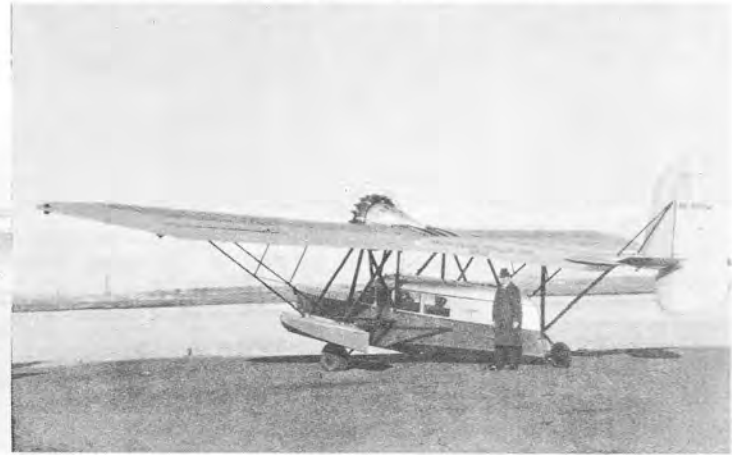
No. 900X, N-42V, of Hamilton Standard Propeller Service which was entered in the 1930 National Air Tour, flown by George Meissner. (Photo - Ford Motor Co., via Stephen J. Hudek)



No. 904, NC803W on the yacht LOTOSLAND. This arrangement proved unweildy and 904 was damaged and sunk in loading. Elwood "Pete" Quesada, later General, and head of the F.A.A. narrowly escaped injury. (Photo - P & W)



No. 905, NC-804W, flown around San Francisco Bay during two years of the Treasure Island Worlds Fair, 1938-39 by Paul Mantz Air Service. (Photo - W. T. Larkins)



Another Hamilton Standard Corp. S-39, No. 909, NC-807W, later sold several times, rumored to be in Iowa (Photo - Sikorsky)

Under the wing of the Pan American Airways S-40, at that time bearing experimental registration - 80V, the S-39 appeared very small. No. 912, NC-50V. (Photo - Mayborn)





The most famous of the S-39's, Martin and Osa Johnson's SPIRIT OF AFRICA AND BORNEO following return from their expeditions and awaiting sale. (Photo - W. H. Anderson)



The former SPIRIT OF AFRICA in CAP duties during WWII with, l.to r., George Haddaway, Jimmie Marshall and R.F. "Wimpy" Neel. Neel was pilot when it was lost in the Gulf in 1942. (Photo - Flight Magazine)



No. 915, NC-53V, awaiting sale at Sikorsky factory. It was destroyed in 1933 when smashed by a drunken fisherman. (Photo - Sikorsky via Pete Bulban)



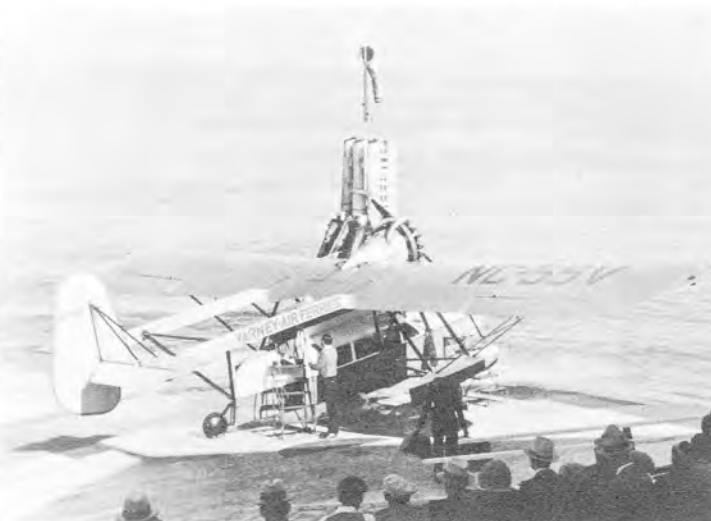
Like another S-39, No. 916 did much exploring, but in Australia, during 1936. It is shown here in 1939 following l.g. failure. (Photo - Gordon S. Williams)



No. 916, now labeled WOLVERINE, NC-54V appeared in CAP colors and served in air-sea rescue operations in the Gulf. (Photo - Kimball/Hudek)

the Sikorsky P & W combination) were sold in 1937 to Charles H. Babb Co. In 1938, P & W borrowed the engine back from Babb to use in an exhibition along with the first P & W "Wasp". Records do not show that the engine was reinstalled into the S-39 and there is some hope the engine may still exist.

From the P & W installation report on the SPIRIT OF AFRICA came information that throttle stops were set at 1900 RPM at sea level, 2050 RPM at 5000 feet and 2150 RPM (full throttle) at 7500 feet. Normal RPM was 2300.



No. 917 in the markings of Varney Air Ferries. The detailed drawing by Member Warren Eberspacher is of this plane. (Photo - Sikorsky)

It was equipped with an 8'6" Hamilton-Standard prop. Fuel tanks were in the wing and hull and a hand wobble pump was used to work fuel from hull to wing tank. This was the only S-39 with any fuel in the hull, all others had tanks in the wing only. Mechanics did not like the S-39 engine installation and insisted that it was difficult to work on.

Walter Pajos of Pratt & Whitney maintained S-39 airplanes for both United Aircraft Corp. and C. W. Deeds. He recently stated in an interview with Lippincott, "The

S-39 was a reasonable airplane to maintain, much easier than the S-38. The engine was difficult to get to due to its position high on the wing, and you had to be careful not to drop tools as they would fall on the windshield below. We solved this by building a special platform which rested on top of the hull and covered the windshield. Much trouble was experienced with leaking riveted oil tanks. Most of our maintenance problems were in preventing corrosion. In those days aluminum was not anodized and stainless steel wires and fittings not available. It was a constant battle to control corrosion".

The following information, taken directly from a 1931 Sikorsky sales brochure, lends color to the history of the S-39 and provide comments not otherwise available.

"SAFETY. A true amphibian*, equally at home on land or water and in the air, the S-39 always has a 'landing field' nearby...less than 10 seconds is all that is necessary to raise or lower its wheels...Quick take off, good climb, high performance...Seaworthy hull...Principal strut fittings are on universal joints...Non-shatterable glass windows...Engine and propeller mounted well forward, giving the safest relative position of power plant and passengers...No fire hazard...No gasoline or gasoline lines located in the hull. Smoke all you like.

"COMFORT. Its exceptionally roomy cabin, with a wide hatch extending its entire length, gives a wealth of space for four or five persons. It is easy to change seats and go to the forward seat beside the pilot, where the easily detachable dual control wheel is located. Excellent visibility for all--270°.

"FLEXIBILITY-ECONOMY-INSURANCE. You need no mechanic to start your engine or fly with you; it is the ideal airplane for a pilot-owner. The S-39 is not a low priced airplane for the multitude, in fact, it has not been built to a price. Built for the discriminating owner, it maintains the highest standard of quality - it is a Sikorsky throughout. The first aircraft insurance in America was on a Sikorsky, the first aircraft passenger insurance in America was on a Sikorsky passenger. Since then, Sikorskys always have commanded the lowest insurance rates, and in 1929-1930, while insurance rates for aircraft went up, the rates for Sikorskys went down still further."

*Sikorsky coined and used the word amphibian which is now obsolete.

FLYING CHARACTERISTICS

After it is all said and done, the final analysis of any airplane, no matter how it is built, is how does it fly?

Three people who had considerable experience in flying the S-39 offered their analysis of the S-39. Vern Carstens, now chief flight operations for Beech Aircraft, and formerly pilot for Martin Johnson in Africa, C. W. Deeds, once Treasurer of Pratt and Whitney Aircraft and S-39 owner for many years, and A. Lewis MacClain, retired chief experimental test pilot for Pratt & Whitney.

Said Deeds regarding the S-39 on the water, "The water characteristics were outstanding. Once, taking off in heavy surf, we went through the first wave, clipped the top of the second and were in the air by the third. I don't know how we managed to stay in the air for green water hit the prop on the first wave." Later, "The S-39 landed beautifully and we would glide in like a duck" Vern Carstens said about the S-39 on the water, "The S-39 was excellent. It landed slowly and takeoffs were clean. The hull design was somewhat different than the S-38 (1) and no spray was thrown over the windshield. Taxiing the S-39 could be somewhat of a problem in a high wind in making a turnaround and taxiing crosswind,

however, I don't believe any more so than any single engine type of water craft."

MacClain added "Though its take-off and landing characteristics were very pleasant, the water maneuvering characteristics, like all single engine water craft was sometimes a pain-in-the-neck. A twin boat had the advantage of speeding up one engine with the other at idle and thereby could swing you around on a sharp radius. On the single engine boat all you had was the rudder and if tide and wind were wrong speeding up the engine would just pull you forward. Dropping one landing gear in the S-39 helped considerably to act as a focus for turning. However, catching a buoy could be a frustrating experience in the S-39."

In regard to landing, taxiing and take-off from land, Carstens related, "The S-39 taxied very well, the tailwheel was steerable and made ground handling very easy. On takeoffs, the aircraft was a little more critical as to gross load than the S-38 and at high altitude conditions we were careful not to overload the S-39. During our stay in Africa we made take-offs from as high as 6500 feet above sea level on water, and 7500 feet above sea level on land.

"Approach and landing conditions required a little more finesse than the S-38. However, on both these aircraft longitudinal trim was maintained by adjustment, from the cockpit, of the horizontal stabilizer. Trimming the aircraft for landing caused a considerable amount of slack in the elevator cables leaving the S-39 unstable longitudinally with power off or reduced to glide speed. This was no great problem after becoming accustomed to it, but was something that had to be kept in mind if wind and thermal conditions were bad."

C. W. Deeds said, "The Haywood Air-Starter was fine if you didn't run out of air in some out of the way place." Carstens agreed, adding, "While the Haywood Air-Starter was an excellent method of starting the engine we would have some trouble keeping pressure up in the tanks and always carried a high capacity foot pump as standard equipment."

"Visibility", said Carstens, "was very good from the S-39 to the side and back as there was no lower wing. There was still some restriction forward because of the long bow. The aircraft was stable in flight in all directions and was pleasant to fly."

Following are accounts of individual aircraft. The headings give, in order:

Construction Number	Model	Register Number	Date Built
1	S-39	X-963M	Dec. 1929

This was the first S-39 and it was built with twin Cirrus "Hermes Mark I" engines of British manufacture. The twin S-39 was one of the "mystery" Sikorsky airplanes, relatively unknown and forgotten after its very brief career. Some Sikorsky personnel actually doubt that an "S" number was ever assigned. Detail drawings were never made to record its basic design. Rollout was in mid-December, 1929. With Sikorsky's test pilot Boris Sergievsky at the controls, the twin S-39 took off on December 24th for the first time. On Dec. 30, during the third flight, the fuel pump to one of the engines failed on take-off. Unable to maintain flight on one engine (which was not able to develop full rpm) Sergievsky landed in the rough part of the Stratford, Conn. field, breaking through the frozen ground and causing the twin to nose over on its back. It was a complete washout although Sergievsky and Serge Gluhareff, the project engineer and his passenger, were not injured.

1	S-39	X-963M	Feb. 1930
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The second S-39 was the single engine prototype powered by a single Wasp Jr. engine. In detail design

(1) See Mitch Mayborn, "The Ugly Duckling", Journal of A.A.H.S., Vol. 4, No. 3 (Fall 1959) Pp. 158-185.

it was a completely new airplane. Painted with a bright red hull and white wings, tail booms and tail, the new metal S-39 was nevertheless to have the same registration, X-963M, as the twin. During an early test flight, the wing structure caused a great scare when it showed signs of buckling in flight. The plane was quickly landed and investigation revealed that the wing was about to fail. The spar was then reinforced in a satisfactory manner. This prototype S-39 was then used by the Sikorsky firm as a general workhorse. Igor Sikorsky went on many flights around the countryside in this plane. The speed and performance was not up to production standards; vibration and drag caused by the engine supports reduced the performance on this plane. All later test work was done on the third airplane, NC-42V, which was the first production airplane. Upon retirement from use at Sikorsky it was given to the Rhode Island State College at Kingston. When the Aero Building at the College was destroyed the prototype S-39 was also scrapped.

900X	S-39A	NC-42V 42V NC-42V	1930
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This was the first production airplane and was designated S-39A. It was operated by Hamilton Standard Propeller Service and was entered by them in the 1930 National Air Tour. The S-39 didn't do well in the Air Tour, coming in 18th with a total of 27,899.6 points as compared to the first place Ford Trimotor with 58,575.6 points. 900X was modified to S-39B under ATC 375 after a letter of conformity was received. The Department of Commerce letter was dated 27 October 1930. 900X was sold to Miller Airways, Put-in-Bay, Ohio that same year, continuing under Miller ownership until 1933. Sold to Manitowoc Air Service, Inc., Manitowoc, Wisc., it was operated as S-39B, 42V. Its owner and use are unknown for 1935. In 1936, NC marks were reissued and 900X was owned and operated by Dr. George W. Young, Minneapolis, Minn. Dr. Young sold the plane in 1939 to the South American Gulf Oil Co., New York City. Apparently it was shipped out of the country for there is no further information about the first production S-39. (2)

901	S-39A	NC-887W	1930
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Photos taken by Sikorsky in 1930 show No. 901 with out lower rudder or engine cowling. Later photos show these modifications made. It was used by Sikorsky for part of 1930 and sold to Hamilton Standard at Homestead, Pa., and from there it went to C. L. Egtvedt, % Boeing Airplane Co., Seattle, Wash. in 1931. Egtvedt (now Board Chairman of Boeing) flew the S-39 from 1931 through 1936. In 1937, NC-887W was sold to Hans Mirow of Nome, Alaska. One of the first S-39's to go to Alaska, nothing is known past 1939 when it was still owned by Mirow. (3)

902	S-39B	NC-888W N-888W	1930
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Sold to A. J. Towson of Rochester, N.Y. who operated it from 1931 through 1933. It was purchased by Edith T. Huntington, Mill Neck, L.I., N.Y., who operated it from 1934 through 1937. In 1938 Edith and her husband, R. G. Huntington, moved to Palm Beach, Florida. When Huntington went overseas in 1941 the aircraft was left idle. He spoke in high praise of NC-888W stating that, "It's been in every cow pasture and beach from Maine to

Florida. It had one of the best beaching landing gear arrangements of any amphibian." No. 902 was powered by Wasp Jr. c/n 16. In 1947 Huntington sold it to a repair firm named Dutch and Mac at Roosevelt Field. The final ending is not known although Huntington felt that the S-39 was probably scrapped.

903	S-39B	NC-802Y	1930
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Not one of the longer lived S-39's, No. 903 was delivered by Sikorsky to John DeBlois Wack, Briarcliffe, N.Y. in 1930. In 1931 it was returned to Sikorsky, then sold to Varney Air Services (1932) who operated it until sometime in 1934. Varney also operated as Varney Speed Lines, Inc., and Varney Air Ferries.

904	S-39A	NC-803W	1930
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Built before July 1930, No. 904 today remains as one of two existing S-39's. It was delivered in 1930 to Col. E. A. Deeds, as a replacement for one damaged in loading on board his yacht, the LOTOSLAND. Harvey Lippincott interviewed C. W. Deeds, son of the Colonel, regarding his use of the aircraft. He related that the first S-39, probably c/n 916, NC-54, was damaged in loading on board his yacht LOTOSLAND. He said,

"The first attempt to put the S-39 (not 904) on board was in New Haven Harbor in 1930. Elwood R. Quesada (then 2nd Lieutenant U. S. Army, later General, and Director of the Federal Aviation Agency) landed the plane in the river and positioned it with the bow facing the hull. The hoist was attached to a bridle secured by four lugs on top of the wing. Quesada was sitting on top of the wing. As the plane was raised and the nose was over the deck railing the sling broke, the S-39 did a backward somersault into the water and landed upside down. Quesada executed a desperate and successful lunge into the water clear of the crash. Quickly sinking, the plane remained underwater for 24 hours before it was raised. The magnesium engine cases were dissolved and the plane was damaged by the fall and subsequent sinking. It also seems that an excitable mechanic took a crowbar to the hull to let the water run out!"

Sikorsky replaced this plane with NC-803W which was also capable of being hoisted on the yacht. However, Deeds indicated that it was more convenient to base the S-39 at United Aircraft's Rentchler Field, East Hartford and fly to the yacht. Sikorsky had designed the S-39 as a sporting plane and Deeds utilized it in this capacity, and mentioned excursions into the wilderness of Canada on several occasions. However, when it became evident that use aboard the yacht was less than successful, the younger Deeds took over ownership in late 1930. Later in the interview, Deeds related some interesting flying tales about this S-39.

"Fog forced us down on a flight from Watch Hills, R.I. to Point Judith, R.I. We landed offshore and taxied in following the shoreline. We would come to fish nets extending out into the water and we would have to go around them, losing sight of the land while doing that. We arrived safely, spending the night at the Dunes Club at Narragansett, R.I. Another time, in the Canadian wilds, 90 miles north of the nearest railroad, we started the engine and taxied out to take-off when the engine died. Before they could restart the engine we had drifted near shore and banged a wing on a tree, denting the wing. However our pilot Jim Williams managed to get us home safely."

The plane was painted with a dark blue hull and silver wings and tail unit. Its owner was unknown from

(2) William T. Larkins, The Ford Story p.164. Aircraft Manufacturers Assn., Aircraft Year Book, 1931. p.550.

(3) (See Inspection Handbook of Approved Aircraft, Chapter XVIII; Department of Commerce, CAA, March 1936, p.76-77, note 724. Hereafter referred to as Inspection Handbook.)

1936 through 1944. By 1945 NC-803W was in Michigan, owned by J. H. Patterson, who still owned it in 1946. Putting on a few years, the S-39 was no longer the plush airplane used as a "flying yacht tender". It is now owned by Clem Simmons of Yakutat, Alaska in 1957, according to the latest information. NC-803W probably still exists as one of two S-39s in Alaska, although listed by the CAA Statistical Study of Civil Aircraft in 1960, as "inactive".

905 S-39A NC-804W 1930

Delivered to Noel Macy who operated it from late 1930 until 1933. Photo taken 3 October 1930 shows it with the name BIRD NEVER inscribed in Russian on the nose. The significance of the name is not known. Owned by Henry G. Fownee, Pittsburg, Pa. from 1933 until sometime in 1937. In 1939 it was owned by Paul Mantz, Burbank, Calif. Mantz operated this S-39 with S-38, NC-158H during the San Francisco World's Fair in 1938 and 1939. Writes Mantz, "We flew for the two years that the fair was open, circling around Alcatraz Island and San Francisco Bay. We carried 100,000 passengers in the two planes. The boys had living quarters right on the dock, along with our offices." The Reverend Boardman C. Reed wrote, "I flew with pilot Monty Sharp for 15 minutes from the Paul Mantz Seaplane Base on Treasure Island on 3 October 1939". Mantz owned the plane at least through 1941. Its ownership and use are unknown during World War II. After the war it appeared in Alaska owned by Donald John McDonald of Anchorage, in 1946 and 1947. No later information is available and it is presumed scrapped.

906 S-39B NC-896W 1930

Very little is known about S-39 c/n 906. It was first owned by Powell Grosley, Jr., Cincinnati, Ohio from 1930 until sometime in 1932. Apparently it was sold to Muncie Aviation Corp. of Indiana as it was last listed owned by them in 1934. No later information.

907 S-39A NC-805W 1930

Apparently slow to sell this S-39A was first registered to Sikorsky, then not listed until 1933 when it was owned by Morrell Foster of Sioux Falls, S. Dakota. In 1934 it was owned by Sioux Skyways, Inc. of Sioux Falls as an S-39B. In 1935 it was owned by Samuel B. Smith, Cleveland, Ohio. Robinson Air Service, Inc., Rochester, N.Y. operated it during 1936 and 1937. Continuing to change hands regularly it was owned by Western Airplane Distributors, San Francisco in 1938 and J. E. McClellan, Los Angeles in 1939 and part of 1940. Its owners were unknown during World War II but it appears owned by B. G. Vandre, St. Cloud, Minn. in 1945-46 and George C. Vanderburg, Spirit Lake, Iowa in 1946-47. There were recent rumors that there was still an S-39 in Iowa but all attempts at locating it have failed. Anyone knowing of the remains of any Sikorsky in Iowa is requested to contact this author.

908 S-39A NC-806W 1930
G-ABFN
NC-806W

Initially registered as NC-806W, No. 908 was exported to England and issued a British certificate of airworthiness on 22 October 1930. William Green wrote that, "It was imported by W. S. Cottingham for use by Personal Flying Services, Ltd. of Heston. It was sold abroad in 1935." Owner and country unknown until it was owned by Beech-Air Sales Co., Inc. of New York City in 1936 as S-39B, NC-806W, along with another S-39, NC-809W. Owned by Louis Schwitzer, Indianapolis from 1937 until sometime in 1940 when it became Muncie Aviation Company's second S-39. Its use and owner were unknown during World War II. It again appeared in Alaska in 1945 owned

by Carl Martin, Jr. of Anchorage. Latest information from 1947 shows No. 908 still owned by Martin.

909 S-39A NC-807W 1930

Originally sold to Hamilton Standard Propeller Corp. a photo taken 16 December 1930 shows it in Hamilton markings. It was next sold to Robert Orrell of Daytona Beach Air Service, Inc. Daytona Beach operated No. 909 from 1932 (converted to S-39B in 1933) until sometime in 1935 when it was owned by Louis S. Purchase, Richmond Hill, Long Island, N.Y. Title transferred to Purchase Flying Service, Inc., Mineola, L.I., N.Y. in 1936. Sold to Carl Evers, New York City in 1937 NC-807W returned to Florida in 1938 with Seaplane Service, Carl Evers now in Palm Beach. Evers returned to NYC in 1939 and the plane continued in his ownership through 1946. Possibly used by the CAF during World War II but this is unconfirmed. No information since 1946.

910 S-39A NC-808W 1930

First registered to Sikorsky in 1930 as S-39A, it was sold to Wachusett Airways, Inc., Fitchburg, Mass., as an S-39B, then listed as owned by the Fitchburg Paper Co., Fitchburg. Possibly Wachusett Airways was the operator for Fitchburg Paper Co. In any event the following letter from Dick Howe gives an account of the life of NC-808W:

The Fitchburg Paper Co. purchased NC-808W new in 1930. Alpine Airways was the registered owner, although it was owned by the paper firm from 1930 through 1946. They flew it from 1930 through 1941. During WWI it was hangared most of the time. In 1946 they sold it and purchased a new Grumman G44A which they operated until February 1960. In 1956 they got back the registration NC-808W."

The latest information, taken from the 1946 registration book, shows NC-808W as owned by Ebon L. Mason, Springfield, Missouri.

911 S-39C NC-809W 1932

One of three S-39's operated by the New York American (now the Journal-American) No. 911 was the only one not destroyed while in their service. (See 915 and 918) The Wasp Jr. SLA powered plane was sold by the American in 1934 to Jacob Rupert, Inc., New York City. Rupert sold it in 1935 to Beech-Air Sales Co., Inc., New York City who operated it until sometime in 1937. O. J. Whitney of New York City (later of Floyd Bennett Field, Brooklyn) used it from 1937 through 1939. Sold to E. W. Wiggins, Edgewood, Rhode Island in 1939. A letter from Jack R. Hughes, chief pilot for Johnson Flying Service, indicates that NC-809W was purchased by Johnson Flying Service, Missoula, Montana sometime in 1939 for \$5500. The purpose was to use the S-39 in fire-fighting. However the performance was not as good as expected and it was sold to Vernon Bookwalter, Rockford Bay, Idaho, sometime after 1947 for \$6000. Bookwalter used it on Coeur d'Alene Lake and eventually took the plane with him to Alaska where he is currently with the FAA at Anchorage. One of Johnson's mechanics reported in 1954 that he saw the plane at the Spenard-Hood Seaplane Base on the outskirts of Anchorage with the left wing panel removed. Charles Scheetz further reported that it carried a sign, "Do not rob anything off this ship, it is going to be fixed."

A newspaper photo and caption from the Anchorage Daily Times, July 11, 1957, sent by Bill Fike, states, "One of the grand old planes of the air age, OLD GRANDAD by name, is being rebuilt by a local couple to serve the hunting lodge at Two Lakes which they are in the process of building. Vic and Monda Lenhart bought the 1932 model Sikorsky in 1953 and have flown it around the ter-

ritory. They are using parts from a second Sikorsky they own, a plane used by the famous explorers, Osa and Martin Johnson, in their travels in Africa."

No. 911 now remains as one of two existing S-39 aircraft. (Author's note: The caption mentions a "second Sikorsky". This leads to speculation that there is still an S-38 existing. Johnson's S-38, No. 414-20 was reportedly destroyed but this was never confirmed. (4)

912 S-39B NC-50V 1931

Registered first to Sikorsky in 1931. Sold to the Cleveland Co., Cleveland, Ohio, who also operated an S-38. No. 912 was in service during 1932 and part of 1933 and was sold to William B. Atwell, Willoughby, Ohio in 1933. Atwell sold NC-50V to Harry Renkert, Jr., Canton, Ohio, in 1934 who owned it through 1941. Its owner and use during World War II are unknown. Another of the "Alaskan S-39's", NC-50V was owned by Gordon Booth of Anchorage from 1945 (possibly earlier) through 1947. No later information.

913 S-39B NC-51V
 N-51V 1930

No. 913, powered by a Wasp Jr., was first owned by the Standard Oil Company of Louisiana from July 1931 until 1932. Possibly used out of the United States by Standard of Louisiana from 1933 through 1935 as it was not listed in the United States directory. In 1936 NC-51V was registered to Roland Harriman of New York City. Harriman sold it to Air America, Inc., Leominster, Mass. in 1939. Air America continued ownership until at least 1947. Writes Dick Howe, "S-39 NC-51V was owned by a fellow named Dickinson who had it for private use. (Apparently Air America, Inc. was the way Dickinson had it registered). In fact, he even had a man-made lake to fly it from. This lake is now surrounded by year-round homes and cottages." Howe added that he thought that the S-39 just deteriorated at the local field, and was in poor condition in 1941.

914 S-39CS NC-52V 1932

This is probably the most famous of all of the S-39 series, and rivals Martin Johnson's S-38 No. 414-20, as the most famous of Sikorsky's early amphibians. The two airplanes, completely outfitted for jungle living and equipped for making adventure films, flew over the African jungles for two years, covering some 60,000 miles. Vern Carstens wrote,

"The S-39, named SPIRIT OF AFRICA, was built new in 1932 and was powered by a Wasp Jr. S2A, supercharged to 375 HP at 7500 feet. The supercharged engines presented quite a problem to us as it was necessary to carry a supply of tetra-ethyl lead to treat the gas so we would have fuel with sufficient octane."

There is considerable information regarding the use of these two aircraft in Martin Johnson's book, Wings over Africa. Incidents too numerous to relate here are told in detail and there are many photos of the airplanes surrounded by natives and lions. Members of the expedition included Osa and Martin Johnson, Vern Carstens, Boris Sergievsky, Al Morway, (Sergievsky and Morway, with Sikorsky, returned after getting the aircraft in flying order), Arthur Sanial, Robert Moreno, Hugh Davis and James Laneri. In a sample of what was to come, Johnson related that at the start of their travels they flew 4,400 miles from Cape Town, South Africa to Nairobi in Kenya Colony, via Bechuanaland, North and South Rhodesia, across a corner of the Belgian Congo, Tanganyika Territory, and the Kenya Colony. After their return from Africa in 1934, the S-38 was sold. The

(4) See Mayborn, "The Ugly Duckling", p.182 and p. 176.

S-39 with the name amended to SPIRIT OF AFRICA AND BORNEO, but still sporting giraffe markings, went to Borneo for additional jungle work with James Laneri piloting. Upon return to the United States in 1936 it remained idle until late 1937 when it was sold to Charles H. Babb, Glendale, California. After that it was owned by G & G Airlines Co., Ltd. of Tucson, Arizona, in 1939 and 1941. When the War broke out, the S-39 was pressed into rescue service with the Civil Air Patrol. After heroically exploring the jungles of the Dark Continent and of wild Borneo, the little S-39 was to be lost off the Texas coast one wintery day in a dramatic rescue attempt. George Haddaway, publisher of Flight Magazine related the events of the day. At the time, he was Major George Haddaway, Commander, Civil Air Patrol Base 10 at Beaumont, Texas. Haddaway said,

"It was Armistice Day 1942 and the waves were running 20 to 30 feet high in the Gulf. We heard a faint voice over the static, 'We are going in...' then silence." As the tragic events of the day began to unfold, it was found that a Fairchild 24-C8F, NC-16814 had gone into the drink at 16:40 GMT time during a routine patrol. On board were 1st Lt. Alfred Koym the observer and partial cripple, and the pilot Jim Taylor. The hardy S-39 was sent out and, guided by the Fairchild's "Buddy" plane, soon arrived at the wreckage. The Sikorsky landed at 17:52. Landing on the rough sea seemed the next thing to suicide but the pilot Robert F. Neel managed it, getting down safely with only a damaged float. Later, PBV's circled the downed S-39 and survivors, but did not land in the rough waters. Climbing on the wing to direct rescue operations, Pilot-Observer James K. West shouted directions to the pilot. Unable to hear, Neel cut the engine, but after getting Koym and Taylor on board they were unable to re-start it. The Coast Guard boat which arrived shortly afterwards attempted to tow the SPIRIT to port but it sank at 22:50, dramatically and finally ending the story of one of the most adventuresome of the S-39s. Unfortunately, neither Koym or Taylor survived the ordeal." (5)

915 S-39B 53V 1931
 NC-53V

The Dept. of Commerce identification marks were issued to Sikorsky for this S-39B. When sold to the New York American in late 1931 it had been modified to S-39C and painted green. George Carroll, aviation editor for the New York Journal American, wrote regarding this S-39,

"The pilot for the Journal-American (in 1932 it was the American, a morning paper) and the Evening-Journal was William L. Cleveland. Cleveland, later Admiral Halsey's pilot during World War II, is Assistant Director of the Dade County Port Authority at Miami International Airport, Florida. During the Lindbergh kidnapping trial, Cleveland shuttled the film back to the newspaper in New York City from the Flemington, N.J. golf course in this S-39."

Cleveland wrote to Carroll regarding the end of the plane.

"In February of 1933, I was returning to New York with pictures of an earthquake at Santiago, Cuba and had anchored overnight in the bay at Manteo, North Carolina. At 5 AM the next day I went down to take off but there was no S-39! It seems a drunken fisherman had run it down during the night,

(5) Robert E. Neprud. Flying Minute Men, p 70. Also, Report, Civil Coastal Patrol No. 10, Civil Air Patrol, Beaumont, Texas, dated 12 Nov. 1942.



The only military S-39, the Y1C-28 photographed on 11 October 1933. Markings were standard Army Air Corps olive drab fuselage with yellow wings. (Photo -A.A.C.)



The CHICAGO PROGRESS, NR-1933, later redesignated NC-14326 and painted white for the New York American as shown in next photo. (Photo - Sikorsky)



NR-14236 now, of the N.Y. American, but it was a mystery as to date of construction or owner when designated NR-1933. (Photo - Williams)



Bright red and yellow markings of Shell's NC-58V, No. 920 shine in the sunlight reflected from the last S-39 built. (Photo - Sikorsky)

cutting it in half and it had sunk in 15 feet of water. I dove down to the wreck and got the negatives and the pictures were eventually published in the paper. The water was freezing and so was I, but as it happened I also salvaged 12 bottles of Bacardi rum hidden under the floor boards. 'Twas a nice way to warm up."

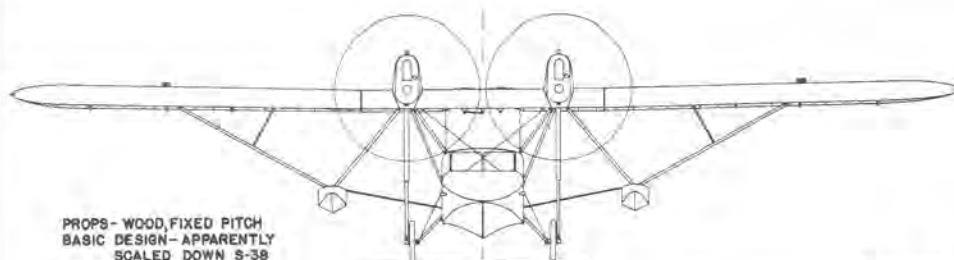
The plane was insured and the paper took delivery on another S-39, No. 918

916	S-39B	NC-54V	1931
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Owned by United Airports of Connecticut, Hartford from mid-1931 through 1932. In 1933 NC-54V was owned by the Land's End Corp., Dover, Conn. Its owner is unknown for 1934. In 1935 it was owned by Sanford Airways, Sanford, Maine. Ward Williams, with his address listed at the Explorers Club, New York City, owned the S-39 in 1936, 1937 and part of 1938. Trevvor W. Boughton, of Melbourne, Australia wrote saying that this plane was operated in the land of kangaroos in 1936. It returned to America and was owned by H. G. Fales in New York City in 1939 through 1941. However, the eventful career of this S-39 wasn't ended when it returned to the states, for much like the SPIRIT OF AFRICA, it was to serve with the Civil Air Patrol. The following account taken from the book, Flying Minute Men, speaks for the S-39 and its rugged characteristics.

"Two fliers from Civil Coastal Patrol No. 2 located at Rehoboth, Delaware performed a heroic rescue at sea that won the Air Medal for them, the presentation being made at the White House by President Franklin D. Roosevelt.

Maj. Hugh Sharp and Lieutenant Eddie Edwards were in the operations room at Rehoboth when a radio distress call announced that Lieutenants Henry Cross and Charles Shelfus had crashed in the ocean 20 miles north of Winter Quarter Light. Sharp and Edwards hurried out to the 13 year old Sikorsky and were on their way. Waves whipped by a strong northwest wind were bigger than Sharp had estimated and he very nearly wrecked the amphibian when he set her down in the water near the wreckage. In the landing the port wing float was smashed, causing the plane to list heavily to the left in the big 10 foot swells. Edwards had climbed out on the hull to look for Cross, the only surviving flier. Tossing him a rope which he failed to catch, Edwards discovered that Cross was paralyzed. Whistling grimly between his teeth, Sharp maneuvered the lopsided Sikorsky carefully in the heavy swells, finally succeeding in bringing it directly alongside the injured survivor, Soaking with salt-water spray and perspiration, Edwards reached out from a prone position and grasped Cross under the arms. Slowly, painfully, he lifted him out of the



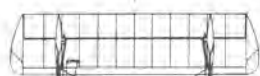
PROPS- WOOD, FIXED PITCH
BASIC DESIGN- APPARENTLY
SCALED DOWN S-38
ENGINES- GIRRUS HERMES
105/115 HP
GEAR- CABLE RETRACTION
(FROM HULL)



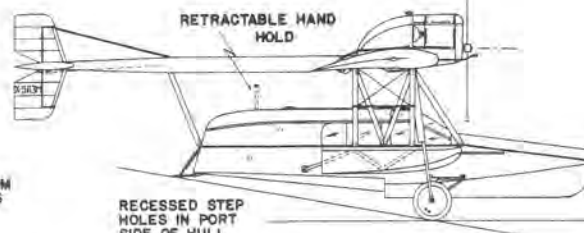
AILERON BELLCRANK ARRANGEMENT
(SHOWING LOWERING PORT AILERON)



PORT SIDE OF
ENGINES



DOUBLE BOOM
BRACE WIRES



RETRACTABLE HAND
HOLD

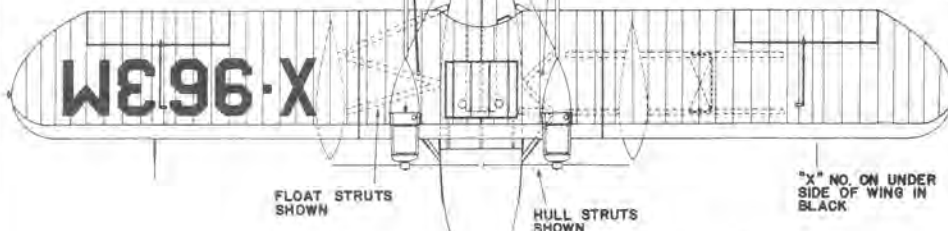
RECESSED STEP
HOLES IN PORT
SIDE OF HULL

S-39 PROTOTYPE X-963M (C/N-1)

FIRST VERSION

COLOR SCHEME

SILVER- WINGS, TAIL, BOOMS,
NACELLES, STRUTS,
WHEEL COVERS, RETRACTION
ROD ON HULL
BLACK- TIRES, LETTERING, SKID,
CABIN STEP PLATE, HULL,
& FLOATS



FLOAT STRUTS
SHOWN

HULL STRUTS
SHOWN

"X" NO. ON UNDER
SIDE OF WING IN
BLACK

ENGINE STRUTS SPREAD
OUT INSTEAD OF FORMING
"V" AS ON FINAL VERSION

ENGINE DETAILS OMITTED
FOR CLARITY



SAME AS SECOND VERSION
EXCEPT FOR CHANGE TO
SINGLE TAIL & SHORTENING
OF BOOMS. NOTE TRIANGULAR
STRUT BRACES.

THIRD VERSION X-963M (C/N-1)



BOTH USE
SAME HOR.
TAIL UNIT



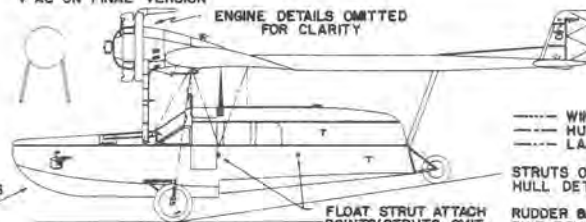
SAME AS THIRD VERSION EXCEPT
REPOSITIONED TAIL LIGHTS &
SWITCH TO FINAL VERSION OF
LANDING GEAR.

FOURTH VERSION X-963M (C/N-1)

COLOR SCHEME

SILVER- WINGS, BOOMS, TAIL, ENGINE NACELLE
(POLISHED), PROP, SIKORSKY HULL INSGNIA,
DANGER LINES & LETTERING, OLEO, HULL
TRIM BELOW WINDOWS
BLACK- HULL, FLOATS, STRUTS, LETTERING, CYLINDERS, TIRES

AILERON CONTROLS
EXIT AT TOP OF
WINDSHIELD



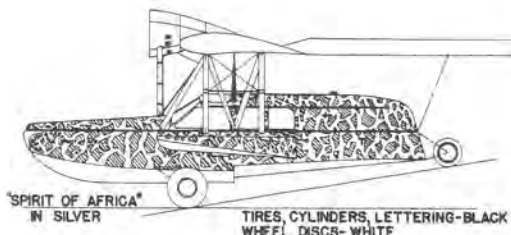
FLOAT STRUT ATTACH
POINTS (STRUTS OMITTED
FOR CLARITY)

SECOND VERSION X-963M (C/N-1)

NEW HULL & FLOATS (BOTH SAME AS FINAL VERSION)
STRUTS CONNECTING FLOATS WITH HULL ATTACHED
HIGHER ON HULL
P & W WASP JR. WITH 8'10" HAM. STD. FIXED PITCH
METAL PROP
LOWER PART OF TWIN TAIL REMOVED & STRUTS
LOWERED
TAIL WHEEL INSTEAD OF SKID
SAME WING, BOOMS, AILERON BELLCRANK ARRANGEMENT

GEAR IS HYDRAULICALLY RETRACTED SAME
STRUT ARRANGEMENT AS ON FIRST
SAME AILERON WIRES ABOVE WINDSHIELD
SAME CROSSED STRUT WIRES IN FRONT OF
WINDSHIELD
HORIZONTAL TAIL APPEARS TO BE SIMILAR TO
FINAL VERSION

----- WING/FLOAT STRUTS
----- HULL STRUTS
----- LANDING GEAR STRUTS
STRUTS OMITTED TO SHOW
HULL DETAIL
RUDDER & ELEV. CONTROLS
EXIT BEHIND FRONT SEAT



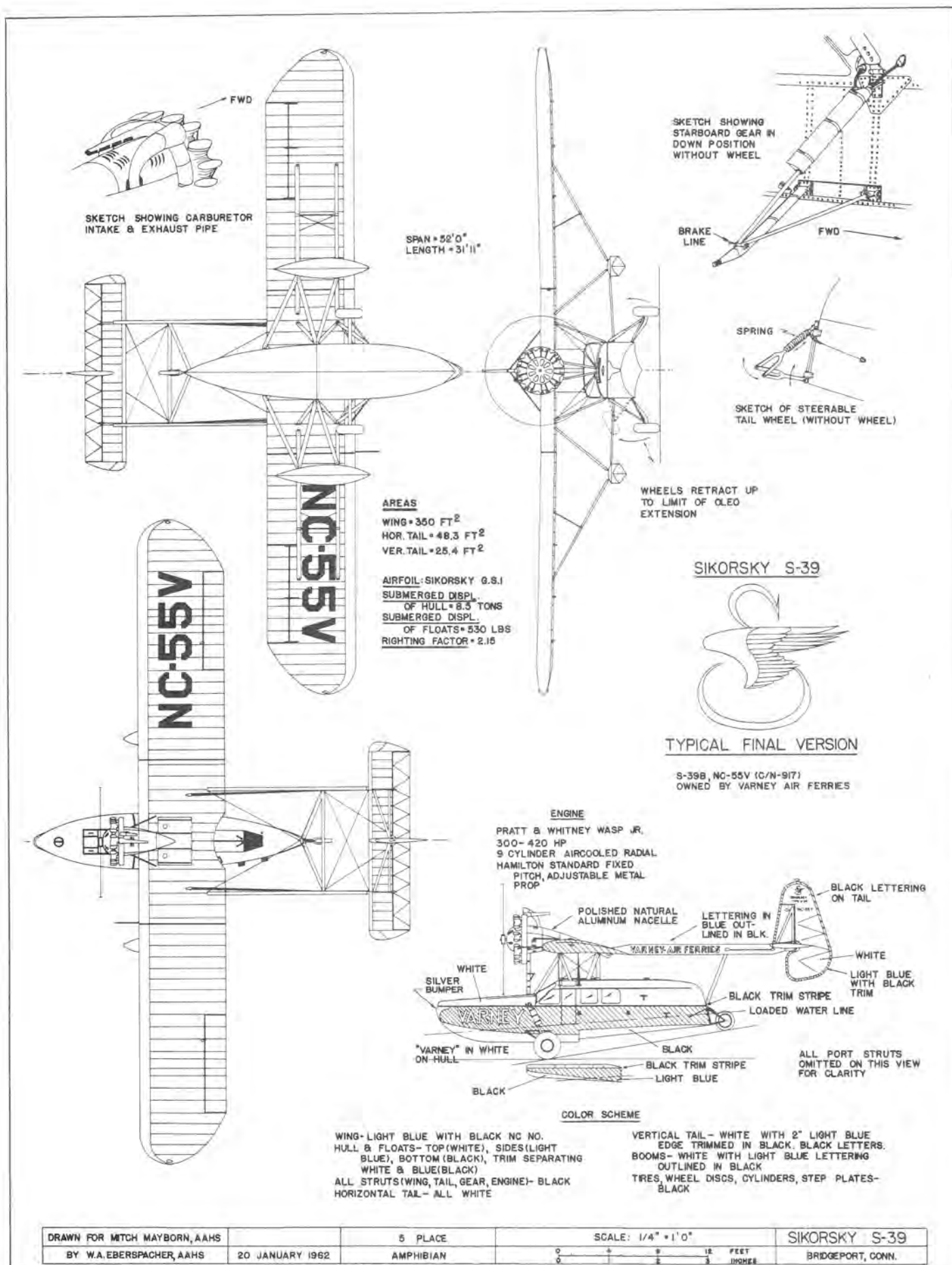
"SPIRIT OF AFRICA"
IN SILVER

TIRES, CYLINDERS, LETTERING- BLACK
WHEEL DISCS- WHITE

NC-52V (C/N-914)
JOHNSON'S "SPIRIT OF AFRICA"

COLOR SCHEME

ALL STRUTS, BOOMS, HOR. &
VER. TAIL SURFACES, NOSE
BUMPER- SILVER
PROP- NATURAL POLISHED
ALUMINUM (HAM. STD. FIXED
PITCH, ADJUSTABLE)
ENGINE NACELLE- NATURAL
POLISHED ALUMINUM
HULL & FLOATS- WHITE BACK-
GROUND WITH BROWN
GIRAFFE SPOTS. BLACK
UNDERNEATH.
WINGS- BROWN WITH 3" WHITE
STRIPES RUNNING CHORD-
WISE AT BREAK IN WING
OUTBOARD OF NACELLE.
BLACK NO. NO.



heaving ocean onto the hull. With Sharp's help Edwards managed to get Cross into the cabin. His back had been broken. Leaving other CAP planes in the area to continue the search for Shelfus, Sharp concentrated on getting his injured passenger to shore. With the damaged float and the rough sea, taking off was out, so they taxied towards shore. The dragging float was causing the plane to list and the speed had to be cut. Edwards, who later flew for the Navy, crawled out on the right wing as far as the pontoon and clung there, his weight placing the S-39 into balance again. Edwards stuck there, stubborn as a burr, until a Coast Guard boat towed the Sikorsky ashore at four the next morning. By that time his fingers had to be pried loose from the wing, having spent eleven hours on the wing. Cross, the rescued flier, ultimately recovered."

(Photo of Sharp and Edwards opposite page 117 and of NC-54V in the center photo section of the book).

917 S-39B NC-55V 1931

First registered to Sikorsky, NC-55V was sold to Varney Speed Lines, Inc., San Francisco Bay Airport in 1932. It was powered by a Wasp Jr. A. Varney used it as an air taxi until it was sold to Charles R. McCormick Lumber Co., San Francisco in 1934. Owned by A. Dieterle, San Diego from 1935 through 1938. No later information.

918 S-39C NR-1933 ?
NC-14326

The one enigma regarding the S-39 history is the NR-1933 registration. No records have been found naming the date built or the owner. No reason has been found for the "NR" designation or its later change to NC-14326. A Sikorsky photo shows the NR registration and the name CHICAGO PROGRESS on the nose. Data from C. M. Withington at Sikorsky attributes the NR designation to c/n 918 and it does fit since all previously published records indicate it was not built until 1934. Apparently it was extensively rebuilt for the new owner, the New York American in 1934. One of the best looking of the S-39's, the New York American's white S-39 became a familiar sight as it buzzed around the country following big news events. Writes George Carroll,

"I covered many stories in this airplane flying with Bill Cleveland and a cameraman out of our operational base at old North Beach Airport, which is now LaGuardia Field. In August 1936, not long after Cleveland left to fly George Vanderbilt's Sikorsky S-43, the White S-39 cracked up, killing Ex-Navy pilot Bill Howell and Mechanic Louis Burnell. They hit a tree while trying to land in a violent thunderstorm at night."

The accident was 2½ miles south of Coxsackie, N.Y. in the Hudson River Valley. The airplane was taking newspapers to Albany and Saratoga Springs. Both men lived in Elmhurst, L.I., N.Y.

919 Y1C-28 32-411 1932

Robert Krauskopf, Archivist of the National Archives, checked on the records for the only military S-39. Y1C-28 S/n 32-411 was delivered to Wright Field about August, 1932, and was transferred to West Point in November of that year. It appears to have been used for familiarization flights at West Point. The records indicate that it was damaged beyond repair in a landing accident on the Hudson River early in October, 1934. It is last listed by the Army as "awaiting survey" in a report issued 31 October 1934.

920 S-39B NC-58V 1930

The end of the line, NC-58V was the last of the S-39's. It was owned by Shell Aviation Corp., New York City during 1933-1935 period. Writes J. L. Wagner, Aviation News Representative for Shell Oil Co., "Shell Eastern, which was consolidated into the Shell Oil Co. a number of years ago, owned an S-39 which was flown by the Aviation Manager, Major R. G. Ervin. This aircraft was operated along the Eastern Seaboard. Ervine is now a Colonel and on the Governor's staff for the state of New Hampshire." It was owned by Henry J. Topping, Jr., Mineola, New York in 1938. Following the War, in 1945-46, NC-58V was owned by Wheeling Seaplane Base, Inc., of Wheeling, West Va. At this time it was converted to S-39C Special, (6) with a P & W 400 hp Wasp Jr. TB (T3A) engine. Sometime later NC-58V made it to Alaska under the ownership of Reeve Aleutian Airways, Inc., Anchorage. Correspondence with Reeve indicated that the airplane was scrapped sometime before 1958. At last reports an attempt was being made to convert the hull into a boat, but we have not heard yet the outcome.

(6) Inspection Handbook, Memo 2-391, Note 2, pp.76-77.

SIKORSKY S-39 APPROVED TYPE CERTIFICATES AND CAA MEMOS

ATC OR MEMO	DATE	MODEL	F & W ENGINE & HP	WT. EMPTY	BAGG. WT.	NO. of PASS.
340	7-22-30	S-39A	Wasp Junior 3700	300	30	3
375	10-8-30	S-39B	Wasp Junior 4000	300	157	4
2-391		S-39C	Wasp Jr. S1A	n/a	n/a	2
2-436		S-39CS	Wasp Jr. S2A 4013	375	157	3

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SPECIAL NOTICE

The Connecticut Aeronautical Historical Association would like to acquire, restore and permanently exhibit several worthy Sikorsky aircraft including an S-38 and an S-39. A.A.H.S. Members are urged to write the author should the location of either of these aircraft types or parts of be known. If possible, provide the name of the owner or person to contact. There are two Alaskan S-39's but current owners and condition are unknown and all attempts at finding this information have failed.

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