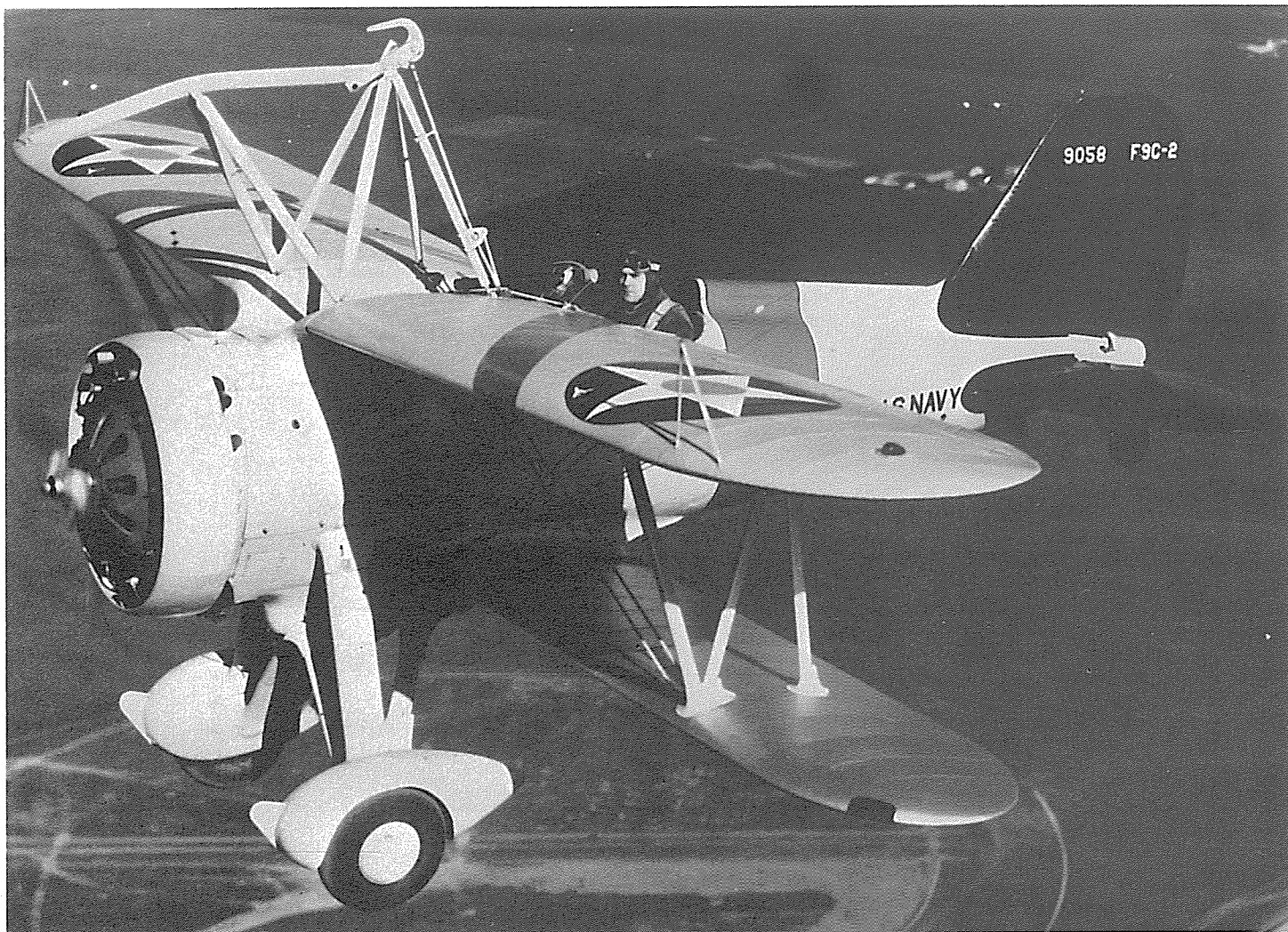




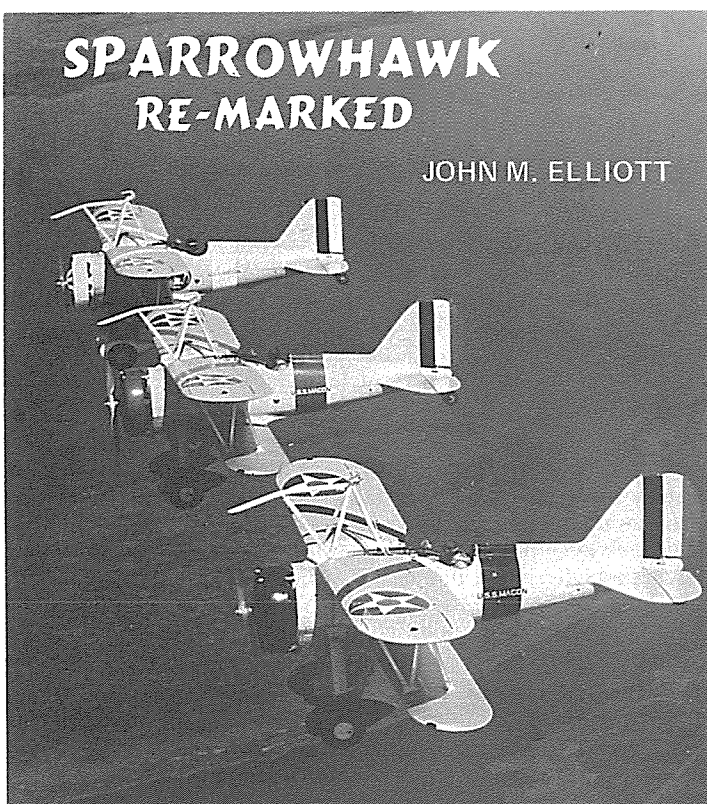
The following article is the result of a request from the National Air and Space Museum to determine the "correct" markings for the Sparrowhawk presently being restored. The data for this study was gathered from the E&M Manual, aircraft accident reports, Board of Survey Report, correspondence between the Bureau of Aeronautics and the Heavier-Than-Air Unit, as well as the general correspondence files on the F9C's. It has proved to be a fascinating bit of research and has caused considerable speculation as to what really did happen at NAS Norfolk during the overhaul. Perhaps some member can provide the missing clues.

There will be numerous people to remind us that the Man on the Flying Trapeze insignia was not used aboard the USS MACON. However, in the formation picture at least one of the aircraft is still carrying this insignia. The photo is dated 6 July 1933 and the black tails were directed 13 October 1933. So it is possible for the insignia and black tails to have been used together. The decision was made to show the aircraft as described below because of its colorful marking appeal. But the records will clearly show that this is an assumption and one that cannot be strongly defended.

The Sparrowhawk is being restored, as nearly as possible, to its original configuration. Specs have been provided and aluminum foil is being applied to all metal surfaces of the wings that will be in contact with the fabric. Original suppliers of paint have been contacted to maintain authenticity. In some areas the information is not available and standard Navy practice, for that time, will be the guiding principle.

SPARROWHAWK RE-MARKED

JOHN M. ELLIOTT





On the previous page 117, the F9C-2, BuNo 9058 with blue fuselage band and wing chevron and black tail, flown by Lt. H.B. Miller, USN (later RADM) on 8 Feb. 1935. (Photo SV 200620, Nat'l Archives 80-G-651300). This was only four days before the tragic loss of the U.S.S. MACON. In the lower photo F9C-2's 9057 (white), 9058 (blue) and 9059 (black) were pictured in formation on 6 July 1933. (Photo AN 36544, National Archives 80-G-466421)

In the photo above the production model F9C-2 BuNo 9056 is shown at Buffalo the day before delivery to Naval Air Station Anacostia. (Photo - Curtiss #M-7352, dtd. 5-2-32)

On opposite page 119 is shown "9056" (supposed) in the Smithsonian Institution, pre-1960, with red fuselage band and wheel pants, and black tail. Fokker T-2 in background. (Photo - Smithsonian Inst. A-38147)

One of the favorite Naval aircraft during the 30's was the Curtiss F9C-2 "Sparrowhawk." During the lifetime of the U.S.S. AKRON and U.S.S. MACON numerous articles were written about the operations and the colorful non-standard markings which were so much a part of its glamour. But what about the end of these unusual aircraft?

The original XF9C-2 model was built and demonstrated to Navy at Curtiss expense. During this time it carried civil registration NX 986M. It was not until after the contract had been let for the six production F9C-2's that the Navy decided to buy the XF9C-2. This delay in purchase accounts for the experimental airplane having a higher serial number than the production models. After purchase it was necessary to send No. 9264 back to the Curtiss factory and have it modified to as near as possible the same configuration as the production aircraft.

With the loss of the U.S.S. MACON and its attached airplanes on 12 February 1935 there were only three Sparrowhawks left in existence. These F9C-2's, BuNo 9056 and 9057, and XF9C-2 No. 9264, were located in the Battle Force Pool at the U.S. Naval Air Station, San Diego, California. Because of the peculiar nature of

the F9C-2, and their limited use without an airship to operate from, they were all designated XF9C-2 on 29 May 1935 and were to be referred to as such in all correspondence. This "X" designation assigned, after the aircraft had been operational for four years, is peculiar and must be borne in mind carefully in the following to keep straight which airplane is really being discussed.

XF9C-2 No. 9264 was shipped to NAS Anacostia on 26 August 1935 "to be placed on line for general flying." Whether the "skyhook" was removed prior to departure from the Battle Force Pool or after arrival at NAS Anacostia is not known but it appears from the existing records that it was never flown with the hook attached during this period.

The limited range, tendency to ground loop, and restrictions on aerobatics kept this from being a favorite to fly and consequently few hours were logged. Age began to tell and in 1936 it became due for an overhaul; up to this time it had not had a major overhaul or fabric replacement. NAS Anacostia was instructed to deliver it to NAS Norfolk for overhaul, and the aircraft pool at NAS San Diego was also instructed to ferry XF9C-2 No. 9057 to NAS Norfolk.

The Overhaul and Repair Department was to determine which of the two airplanes were in the best condition, and this one would be overhauled. The other was to be cannibalized for parts and then be surveyed from the Navy inventory. Evidently the Bureau of Aeronautics had forgotten that No. 9056 was still in the pool. After being so advised, new instructions were issued to send both airplanes and from the three, two would be overhauled and the third would then be stricken after providing all useable parts. BuNo 9264 was to return to NAS Anacostia while the other was to remain at NAS Norfolk as a utility aircraft.

The two XF9C-2s, 9056 and 9057, departed NAS San Diego on 12 October 1936. Trouble was to plague No. 9057. Upon landing



Photographs courtesy of John M. Elliott.

at Kingman, Arizona on the first leg Lt. Stukey ground looped, damaging the right lower wing and propeller. These were repaired and he left the following morning for Albuquerque, New Mexico. Upon landing there the airplane nosed over, breaking the fuselage, vertical stabilizer and left end strut. 9057 was disassembled and shipped back to NAS San Diego where all useable parts were removed. These, plus all parts still in the supply system were then transferred to NAS Norfolk. The residue of the airframe was stricken from the Navy's list in November 1936. BuNo 9056 continued on, arriving at NAS Norfolk on 19 Oct. 1936.

No. 9264 left Anacostia for Norfolk, on Nov. 3rd. Engine trouble developed enroute and a forced landing was made at Monaskon, Virginia. A truck and crew were dispatched from the Naval Proving Ground Dahlgren, Va., to disassemble and deliver it to NAS Norfolk. Thus the stage was set once again for the overhaul of one airplane and the survey of the second as originally planned. A Board of Survey consisting of Lts. W.J. Slattery, J.I. Taylor, and R.D. Hogle, was convened at NAS Norfolk and the decision, dated 16 Nov. 1936 to overhaul No. 9056 and strike No. 9264. The original "X" model No. 9264 was stricken from the Navy's list on 30 November 1936. OR WAS IT?

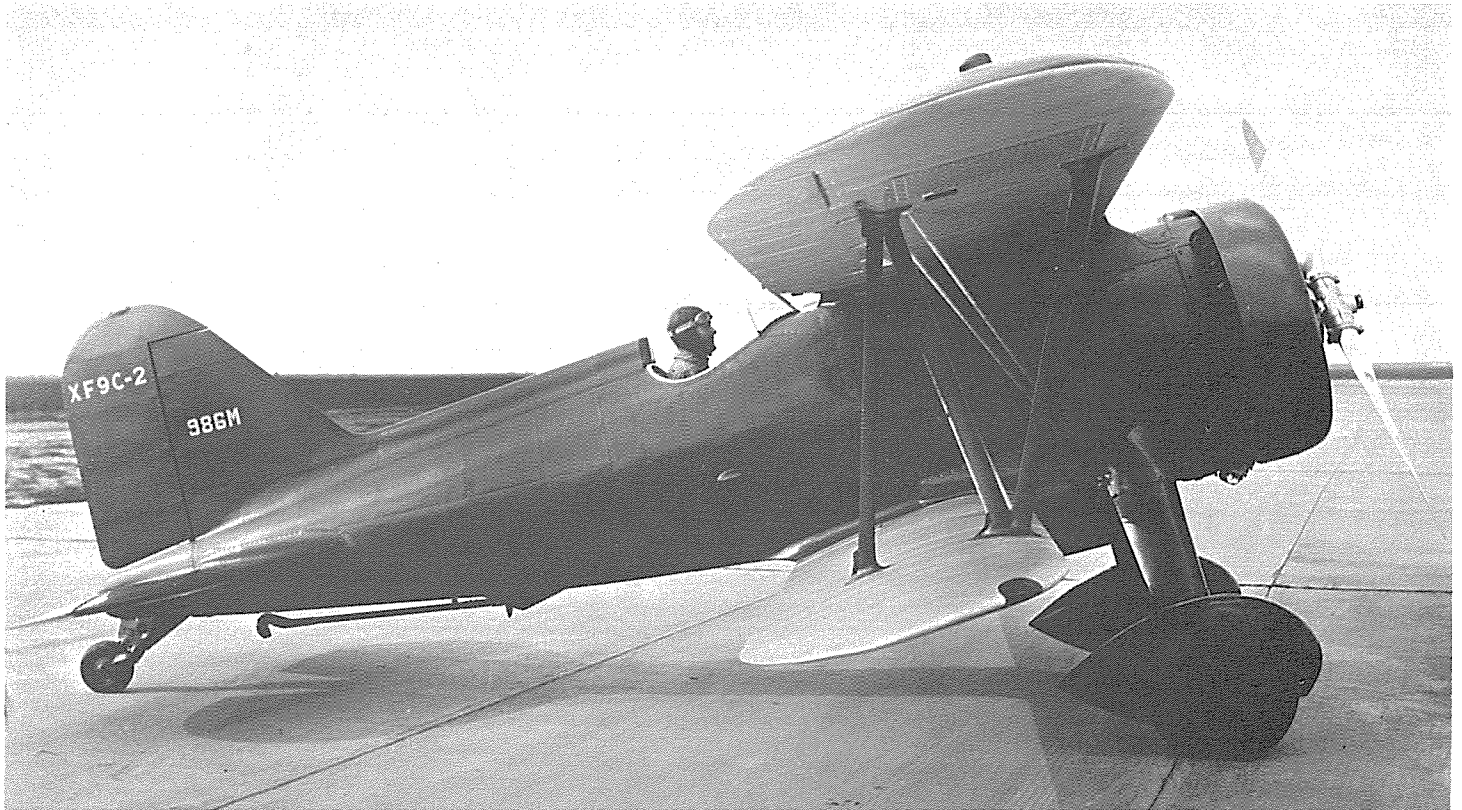
Upon completion of the overhaul work No. 9056 was returned to duty, but was retained at NAS Norfolk. Time caught up with the old veteran and it was recommended that it be surveyed because of age, lack of replacement parts and little usage by the local pilots. While action was pending on this, and 9056 sat in the "bone yard," it was seen by Commander A.P. Flagg, CO of the Air Station. Because of the unique place the Sparrowhawk had in the development of Naval Aviation and the fact that it was the last remaining example of a particular type of flying, it was recommended that the airplane be given to some museum such as the Smithsonian Institution.

The offer was quickly accepted by Dr. Leonard Carmichael, then Secretary of the Smithsonian Institution. Eventually No. 9056 was delivered to the Washington Navy Yard and transferred to the Smithsonian Institution. Numerous items of Government equipment had been removed prior to transfer and lengthy negotiations ensued resulting in the eventual replacement of all instruments, etc., with the exception of the "skyhook" which was not available. A reproduction hook was made and the Sparrowhawk was put on display in the aircraft collection where it was seen and enjoyed by many thousands through the years. In 1959 it was removed from the display and placed in storage.

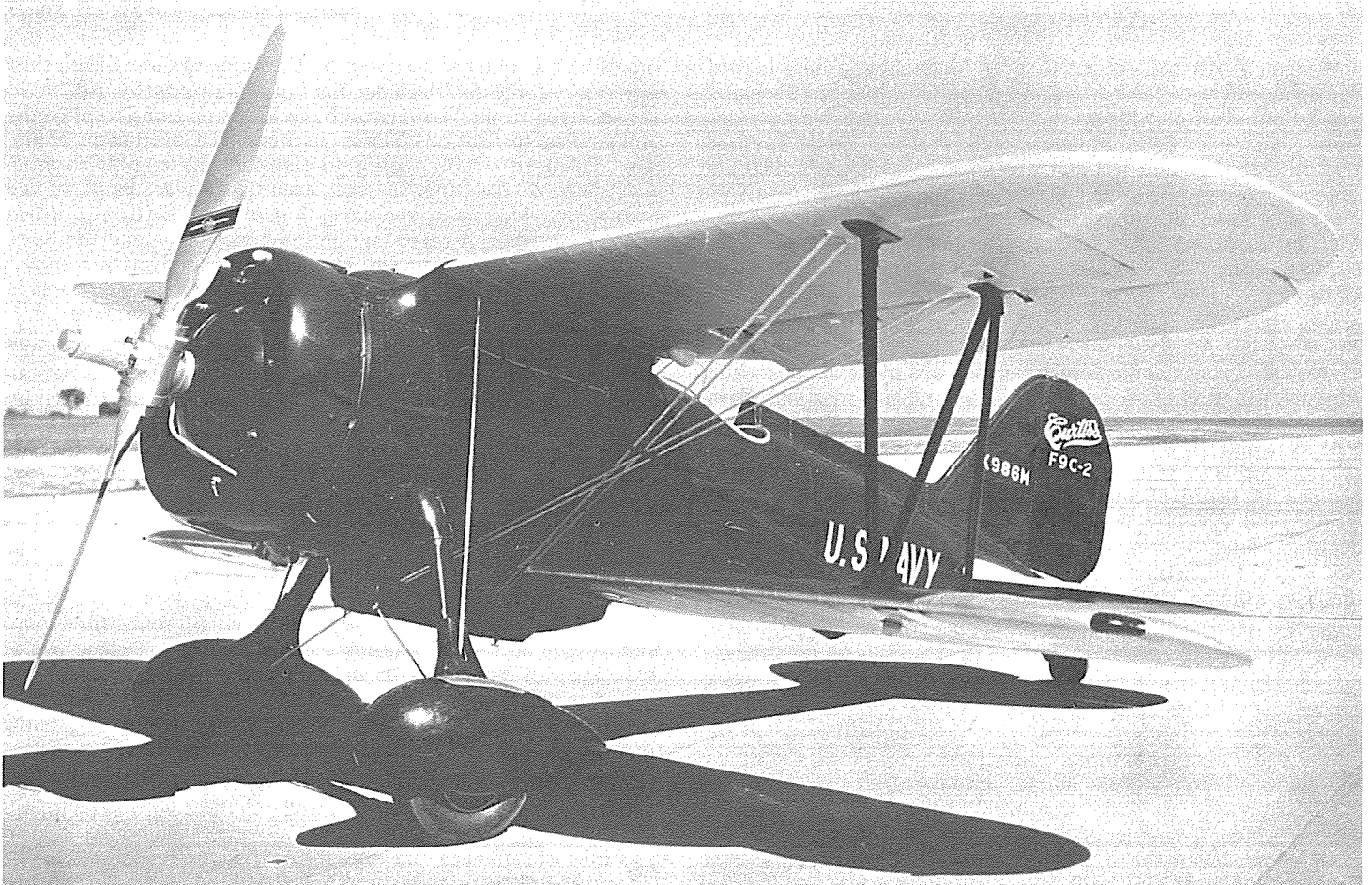
Early in 1971 it was determined that the Sparrowhawk" should be restored in preparation for possible display in the new National Air and Space Museum building. This work was undertaken by the local Antique Aircraft Association chapter working one night a week. As the aircraft was disassembled it very quickly became apparent that all was not as had been thought all these years.

When given to the Smithsonian the fuselage was unpainted and had remained so with the exception of the section leader fuselage band and the words U.S.S. MACON. However when viewed at the proper angle the word ANACOSTIA could be seen etched in the metal where the paint had been removed at some time. This seemed peculiar, as the records showed that the airplane was at Anacostia for short periods in 1933 and it was known at that time that the aircraft was to be assigned to the U.S.S. MACON. It hardly seemed likely that the Air Station would apply its name for these periods.

Another puzzling point was that large steel fittings, just forward of the lower wings, had been sawed off flush with the fuselage skin. Stripping the paint from the tail provided yet another item to question. Etched into the rudder and fin, just as ANACOSTIA had been on the fuselage, was XF9C-2 9264. Speculation as to



The XF9C-2 at an earlier state, c. 1931. In this form it had the single-strut landing gear but in the photograph below this had been connected to the upper wing root by a streamlined tie-rod. Its designation as XF9C-2 was also accompanied by civil registration 986M and the rudder was as balanced on the XF9C-1. In the lower view this was changed to F9C-2, with a production-type rudder, and the registration is now X986M. Information on the date of the tests, the results, and particularly concerning the controllible pitch propeller is desired. (Jess C. Barrow Collection)



the fin and rudder having been replaced as part of the major overhaul in 1936 was soon resolved when it was noted that the rigging and fuel system diagram varnished to the righthand side of the cockpit was identified as XF9C-2 No. 9264.

Then the question of the sawed off fittings was resolved. These were the rear landing gear fittings on the original "X" model when it had a cantilever landing gear. When 9264 had been reworked at the Curtiss factory in February 1933, to "bring it as near as possible" to the configuration of the production models, the old fittings were not needed for the new tripod-type landing gear and had been sawed off.

How could it be that in 1971 we had an airplane that had been scrapped in 1936? That question resulted in many hours of discussion and speculation and most likely will not be resolved as the Navy thought it was the production model 9056 that they were operating after the overhaul period. All the correspondence, accident reports and other records generated during this four year period so identify the airplane. What could have happened?

It seems apparent that there was a lack of interest in the obsolescent airplanes at the time of overhaul both in the shops and administrative section to allow such an error to happen. One "explanation" could be that both airframes were in the shop at the same time and someone attached the work log to the wrong airplane and no one noticed the discrepancy in serial number on the airframe with that on the papers. This would mean that the better airframe was surveyed and the Navy continued for another four years to fly the airframe that was to have been surveyed. Hardly. Is it any more likely that a Board of Survey, three qualified Naval Aviators, were so confused that they didn't know which airframe they were looking at when they made the recommendation to strike one and keep the other? There could hardly have been any question as to which was which; one was flown in, the other was delivered in pieces by truck. And did no one question the fact that the engine log didn't jibe with the engine or the aircraft record which showed a different engine serial number?

After all the evidence was checked and it was determined that it was in fact 9264 and not 9056 that the Navy had continued to fly and then transferred to the Smithsonian Institution, the question arose as to how it should be painted. Part of the legend and popularity of the Sparrowhawk has been its brilliant and distinctive painting. The paint scheme had been the subject of considerable correspondence between the Bureau of Aeronautics and the Heavier-Than-Air Unit through its several colorful versions. Though photos show that XF9C-2 No. 9264 was equipped with a skyhook and flew from the U.S.S. MACON it always retained the bare metal fuselage. On the other hand, No. 9056 was the No. 1 airplane of the HTA Unit; and as the unit leader it sported the red section-leader fuselage band and a red chevron on the top surface of the upper wing.

And so the decision was made to paint the Sparrowhawk as

F9C-2 No. 9056 (as the Navy thought it indeed was during the latter part of its service with the MACON) making careful and prominent notation in the records that it was in fact the XF9C-2 No. 9264. The problem of the colorful non-regulation paint schemes was resolved by the rediscovery of BuAer letter dated 22 Sept. 1933 which required that F9C-2's be painted in compliance with existing instructions, but also authorizing the use of the section-leader fuselage band and wing chevron on each airplane. This letter also directed that a tail color be assigned to the HTA unit.

Once the decision was made to paint the aircraft as No. 9056 it then remained to decide which of the colorful paint schemes was to be depicted. SR-2a *Specification for Naval Aircraft Insignia and Markings*, which was in effect at the time being depicted has been the guide for all regulation painting and markings. The remainder has been determined from numerous photos as well as the correspondence between the HTA Unit and the Bureau of Aeronautics.

Accordingly the top surface of the upper wing and ailerons will be chrome-yellow with an insignia-red chevron 12 inches wide outlined with a ¼-inch black stripe. National aircraft insignia appear at the wing tips, on the top surface of the upper wing and the under surface of the lower wings. The under surface of the upper wing and all of the lower wings will be aluminum doped.

Fuselage, "skyhook," auxiliary fuel tank, landing gear and wing struts will all be aircraft gray. Engine cowl and shutters, forward of the cylinders, ring cowl, wheel spats, and the 21 inch wide section leader fuselage band will be insignia red. The fuselage band to be outlined with a ¼-inch black stripe and be located just aft of the cockpit. F9C-2 9056 appear in 1-inch white letters near the top, on both sides, of the rudder and fin respectively. U.S. NAVY in small non-regulation letters will be on both sides of the fuselage just under the horizontal stabilizer. U.S.S. MACON will be centered on the section leader band with the U and N in black against the aircraft gray, all other letters are white on the red band.

The propeller tips will be painted in 4-inch stripes of red, yellow, and blue with the red band at the tips. The "Man on the Flying Trapeze" squadron insignia is to be applied to both sides of the fuselage centered with the forward edge of the cockpit. The rudder will be painted with red, white and blue vertical stripes. Once restored to its original colorful appearance it will be ready to go back on display and thrill thousands of visitors to the National Air and Space Museum with the glamour and excitement associated with early aviation developments.

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See also "Genealogy of the Curtiss Sparrowhawk Dirigible Fighters" by Nye, Schmitt, Larkins, Riley, Sloan, et al, in JOURNAL of AAHS, Vol. 3, No. 2, pp. 70-99, and Mitchell, John, "Chronological History of the F9C-2 and its use on the AKRON and MACON," pp. 100-109. Also, Smith, R.K., *The Airships AKRON and MACON*, Annapolis, U.S. Naval Inst., 1965, p. 201.

ABOUT THE AUTHOR

John M. Elliott, Major, USMC (Ret), is an early Member of the A.A.H.S. and contributed the recent article on markings of U.S.A.A.F. airplanes in the North Africa campaign, "Wonder Where the Yellow Went," JAAHS, Spring, 1972.

His interest in aviation began at an early age and he absorbed aviation lore while sitting on the concrete forms for the Lockheed S-1 fuselage in Santa Barbara, Calif. waiting for a streetcar from the beach.

He enlisted as a private in the Marine Corps in 1942, obtained his commission in the Korean War, and participated in the growth of Marine Corps aviation from the time of the .30 calibre free gunnery in SBD days to the nuclear age. He retired after 24 years.

Major Elliott is presently Chief, Collections Branch, National Armed Forces Museum Advisory Board, Smithsonian Institution. He says, "They evidently thought that a Marine who had lived out of the salvage yards for that long must believe they were the major supply system, pretty much the case in the Museum world."

