

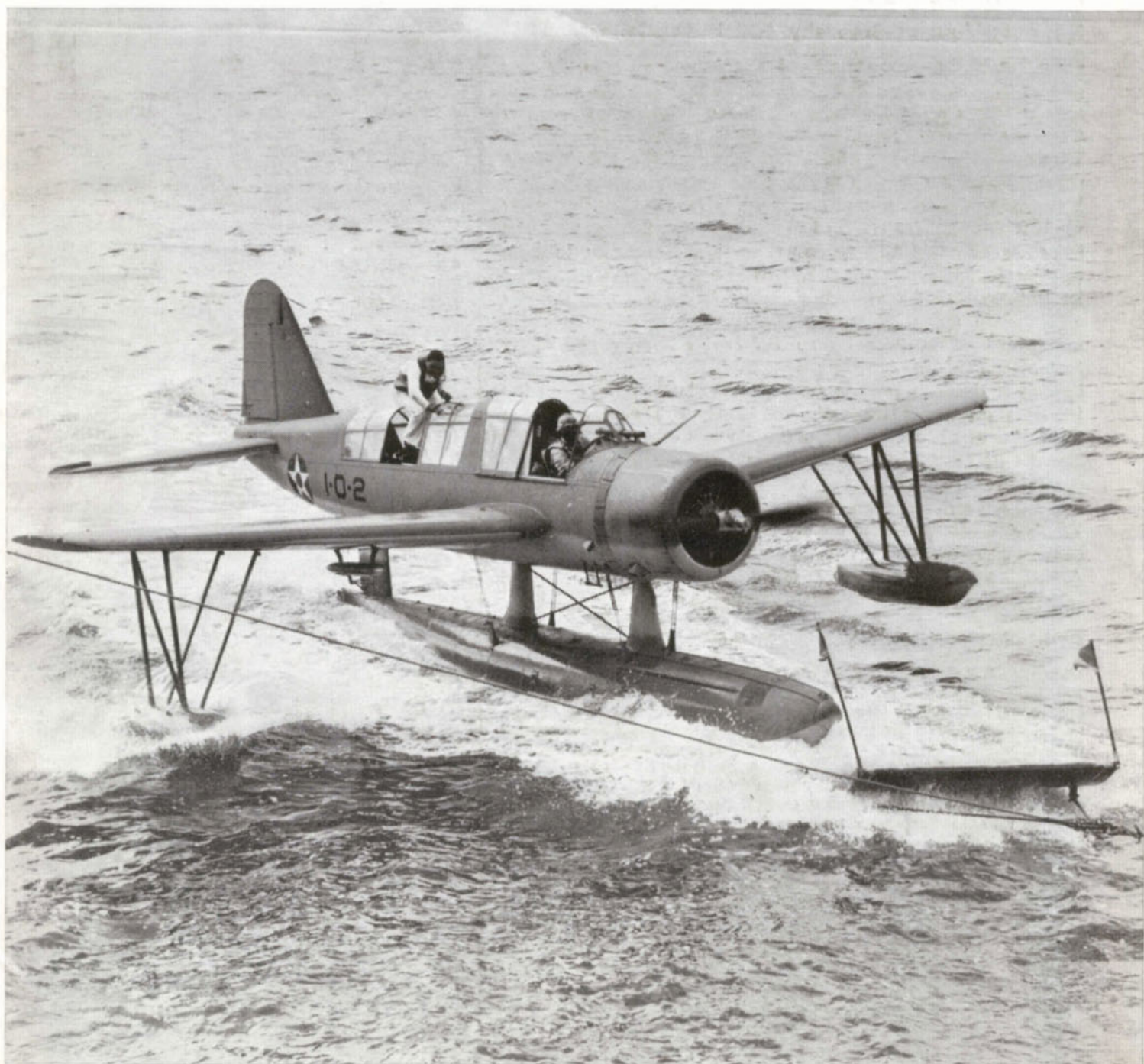
AIRCRAFT PROFILE

251

Vought-Sikorsky OS2U Kingfisher

40p

T. E. Doll and B. R. Jackson





Editorially Speaking . . . No. 11

WHY? you may reasonably enquire is *Profile* No. 251 jumping the queue and appearing so early—mid-summer 1972 instead of early 1972. Well, it's a long story! But in a nutshell, we plan programmes a year in advance. We like to have something well advanced just in case we hit a scheduling problem. It happened. The MiG-21 *Profile* (No. 238) dangled the happy prospect of "even more photos . . . but it will take extra time." So No. 238 marked time while No. 251 stepped smartly forward. No mystery now. And we think Kingfisher makes a photographically attractive *Profile*!

CHARLES W. CAIN

ABOUT THE AUTHORS

No. 251: Vought-Sikorsky OS2U Kingfisher

Co-authoring has advantages and disadvantages but in the case of this *Profile*, no-one can deny that teamwork has provided readers with a more detailed study of the OS2U-series than has hitherto appeared in print.

Thomas E. Doll. Born in St. Louis, Missouri, Tom Doll had a nearby Naval Air Station to shape his lifelong affinity for "Fly Navy". In 1955 he settled permanently in Los Angeles; after spells with Lockheed and Ted Smith Aviation, finally as a paint inspector, he works fulltime on writing, and also model-finishing (for Revell). Member of U.S. Naval Institute, A.A.H.S. and I.P.M.S. Tom Doll previously authored *Profile* No. 171: *Douglas TBD Devastator*; also, in the USA, several naval aviation works including *US Navy Markings: WW2 Pacific Theater*, and *Flying Leathernecks in WW2*.

Berkely R. Jackson. Born in Aruba, Netherlands Antilles, in the 1930s; thence to Richmond, Va., 1942, and now settled in California as a surveyor for the County of Los Angeles. The US Naval Ordnance Test Station, China Lake, Calif. provided the spark for his interest in naval aviation. His first published work was *Skyraider*; this was followed by the Doll/Jackson *Grumman TBF/TBM Avenger* and their 1972 *Douglas TBD Devastator* (Aero Publishers, California). Jack Jackson is also a member of A.A.H.S. and the L.A. Chapter of I.P.M.S.

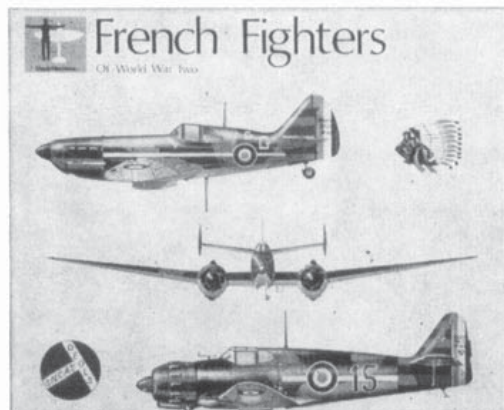
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New in the Men and Machines Series



By John F. Brindley

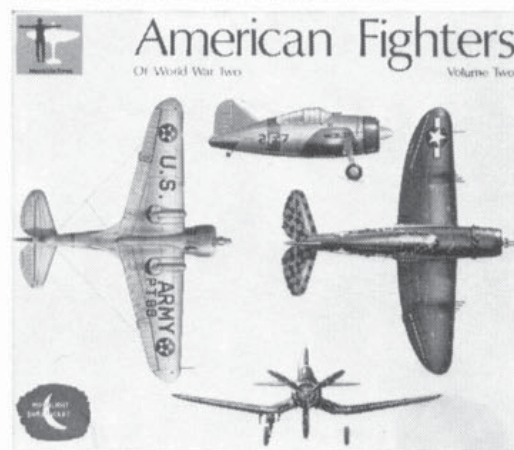
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Sheet Street, Windsor, Berks. SL4 1EB.

64 pages, incl. 14 in colour. Price in U.K.: £2.00.

Latest addition to the colourful landscape (8×10in.) "Men and Machines" series—this is No. 11—is John F. Brindley's fascinating account of *French Fighters of World War Two*.

With the active co-operation of just about every noted W.W.II aircraft historian in France, the author has produced a 40,000-word masterpiece; French military aviation of the 1930–40s having been largely ignored heretofore in the English language. An extended (9-pp.) Introduction serves to clarify the events which led to the debacle of 1940, and then recounts the subsequent use of French fighters to 1945. Major types (with colour artwork) include the Bloch MB 151–155, Dewoitine D 520, Morane-Saulnier MS 406, Curtiss Hawk 75 and Potez P 630 series.

In the Men and Machines Series



by Dr. René J. Francillon

64 pages, incl. 12 in colour. Price in U.K.: £2.00.

Volume Two of *American Fighters of World War Two* now complements Dr. Francillon's widely acclaimed Volume One which features the P-26, P-38, P-39, P-51, P-61, F4F and F6F.

Colourful indeed are the 12 pages of brilliant artwork—5-views of aircraft in full squadron markings—and each main type is expertly detailed with well-chosen photographs and informative text of over 30,000 words. The main types are the U.S. Army Air Corps/Forces' Curtiss P-36 ("Hawk") and P-40 Warhawk, Douglas P-70 ("Nighthawk"), Republic P-47 Thunderbolt and Seversky P-35; plus the U.S. Navy's Brewster F2A and Chance Vought F4U Corsair.



OS for Observation Scout. Fine September 1944 study of a US Navy OS2U-3, flown by Ensign P. L. Ferber, undertaking the most important role of this floatplane, that of ranging for the guns of the Fleet. The Pacific War offered many such occasions—as did the invasions of Sicily, Mediterranean France and Normandy. This particular seaborne assault was the invasion of the Japanese mandated (1920) island of Angaur in the Peleliu group of the s.w. Caroline Islands.

(Photo: US Navy Dept., National Archives, ref. 80-G-283751)

Vought-Sikorsky OS2U Kingfisher

by T. E. Doll and B. R. Jackson

OF the Kingfisher it can be said that in its time of war it performed well enough that men are alive today because of its rugged versatility and the dedication of the virtually unsung airmen who plied their trade from the fantail of a battleship, the mid-section of a cruiser or destroyer and from shore bases.

KINGFISHER DESIGN AND PRODUCTION

The OS2U was designed by Rex B. Beisel of the Chance Vought Aircraft Division, one of four divisions of the United Aircraft Corporation which included Pratt & Whitney, Hamilton Standard and the other aircraft division—the Sikorsky Aircraft Corporation. In 1939 the aircraft manufacturing operations of the United Aircraft Corporation were merged into the Vought-Sikorsky Aircraft Division at Stratford, Connecticut, and this situation remained in existence until January 1943 when the two companies reverted to their earlier status of separate firms.

The two companies were then able to concentrate on the development and production of widely differing types of aircraft—Vought on combat aircraft and Sikorsky on helicopters for military and commercial application. The greater part of Kingfisher production was under the Vought-Sikorsky banner.

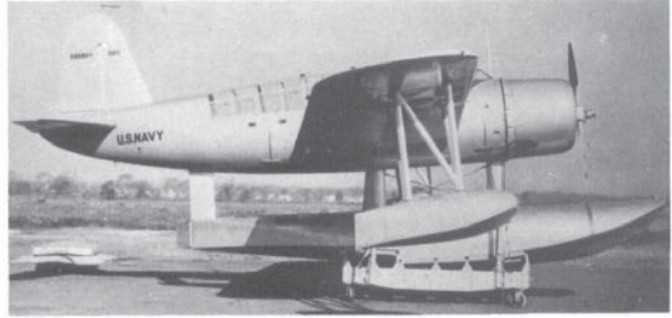
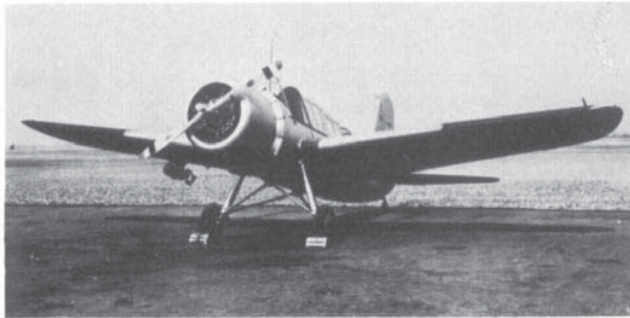
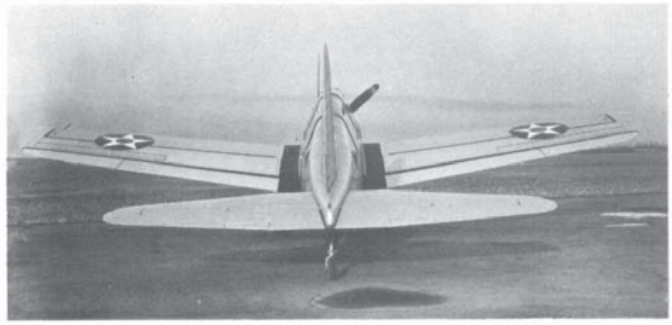
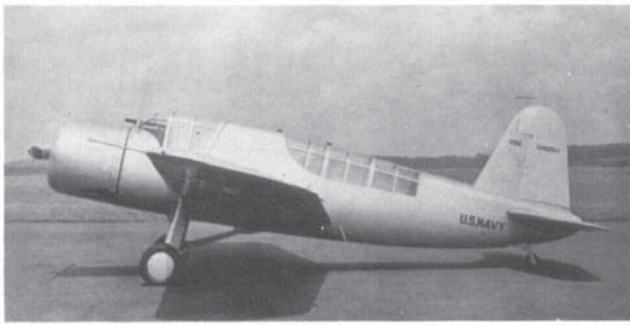
The OS2U was unique in design for two reasons. First, it was the first US Navy scout observation two-seater to incorporate the monoplane wing design specifically for catapult launching from battleships and

cruisers. Secondly, from its conception in the late 1930s, the designer tackled the problem of sturdy construction capable of withstanding the constant stress of countless catapult launchings. Rex Beisel was the first designer to exploit spot-welding in order to create a non-buckling fuselage structure. This method he introduced into the Kingfisher design. With the new method of spot-welding, not only was conventional maintenance time (on the OS2U) lowered but also the new technique helped extend the Kingfisher's service life. Additionally, the OS2U-1 was to be the first Vought production aircraft with full-span flaps and spoiler lateral control.

XOS2U-1—On March 1, 1938, the prototype Kingfisher—XOS2U-1, Bureau of Aeronautics serial 0951—was flown for the first time at East Hartford, Connecticut. The pilot was Paul S. Baker who, on May 19, 1938 undertook the first seaplane flight. The prototype was powered by a Pratt & Whitney R-985-4 which was rated at 450 h.p. The XOS2U-1 had its own distinctive paint scheme; dark blue fuselage, wings and horizontal tail surfaces; aluminium floats and yellow rudder.

OS2U-1—In April 1940, the first production OS2U was airborne and, four months later, August 16, the first OS2U joined the US Fleet.

The Aviation Unit of the battleship USS *Colorado* (BB 45), began operational trials with the OS2U almost immediately. Observation Squadron Four (VO-4),

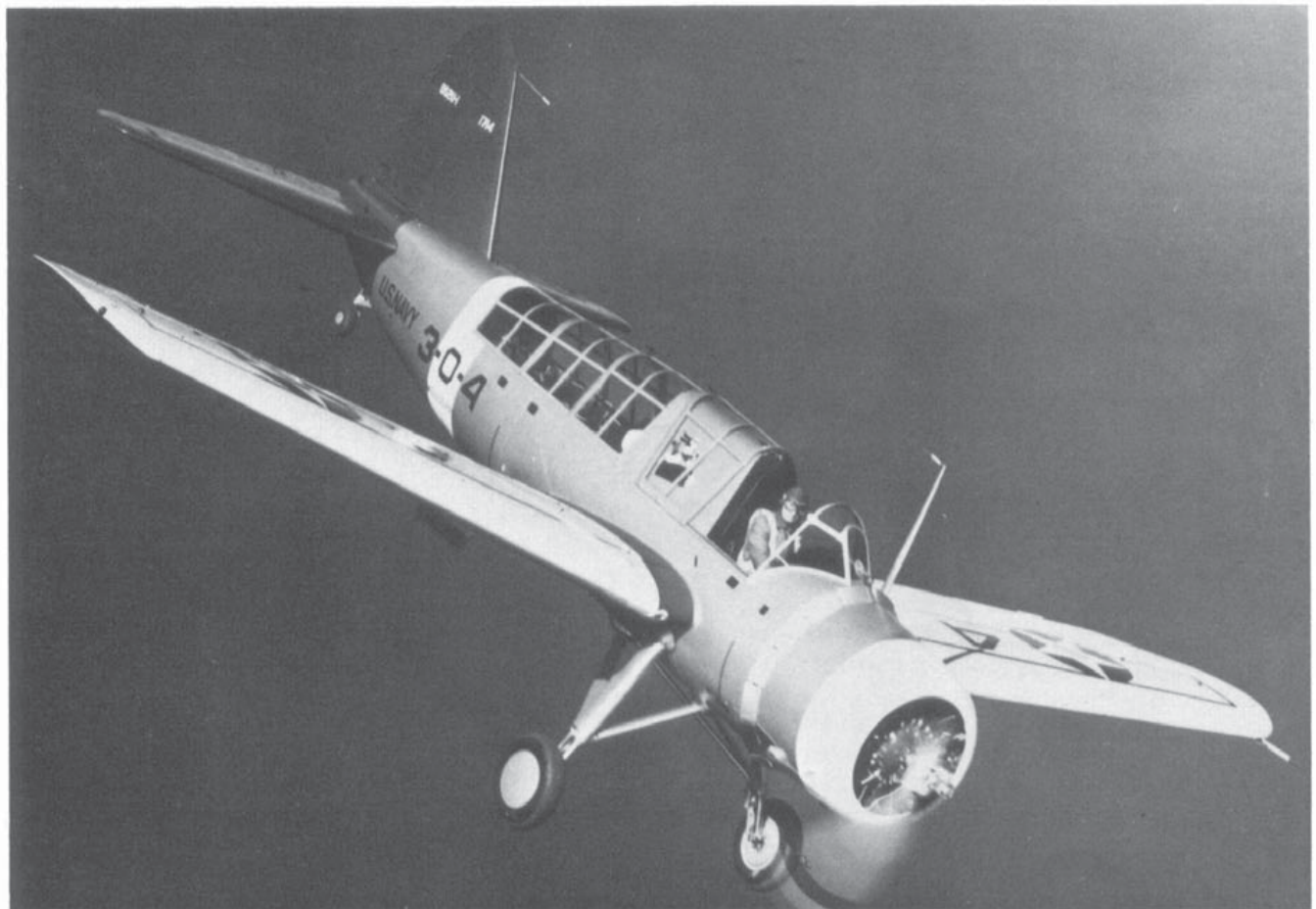


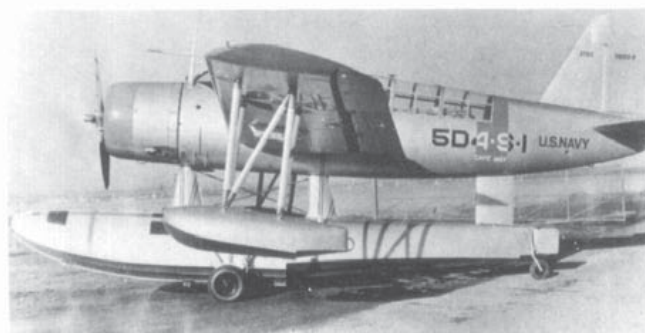
All "first-offs". (Top left, bottom right) Prototype XOS2U-1 (Bureau Number or serial BuNo.0951) in "dry" and "wet" forms and subsequent all-silver finish in 1938. This July 1938 view of the landplane shows Aldis-type telescopic gun-sight has been incorporated; similarly, floatplane now has the additional rear pylon strut to float which became wider on production models. Transparency curve amidships only applied to BuNo.0951. (Bottom left) May 1940 view of first production OS2U-1 (BuNo.1681) showing only one 100-lb. bomb in position on the two Mark XLI Mod.1 racks. (Top right) First production OS2U-2 (BuNo.2189) also in 1940. Aluminium varnish finish provides clear outlines to the Beisel lateral-control spoilers visible immediately aft of national insignia.

(Photos: United Aircraft Corp. via Harry S. Gann and Lloyd S. Jones)

The 34th production OS2U-1 (BuNo.1714) in early 1941 before the change to drabber non-specular (non-reflecting) "warpaint" greys (from March '41) and blues. Markings reveal that this OS2U-1 was allocated to Observation Squadron Three (VO-3) aboard USS Mississippi (BB41) of Battleship Division Three, United States Fleet. VO-3's Disney-like emblem ("Oswald the Lucky Rabbit" riding a 16-inch shell) is located between the cockpits. Colour scheme: aluminium-varnished fuselage, white bands encircling motor cowling and rear fuselage and "True Blue" tail surfaces. Top surfaces to wings were orange-yellow and undersurfaces silver. Hamilton Standard 2-blade propeller silver but anti-dazzle rear faces; normal tri-colour tips (see photo above) with outer red, centre yellow and inner blue. This colourful display was of practical origin providing both ship-to-air identification and facilitating air-search recovery in the event of an out-of-sight emergency alighting.

(Photo: Vought Aeronautics via authors)





Still colourful. (Top) OS2U-1 (BuNo.1685) of Observation Squadron Four (VO-4) assigned to USS Colorado in August 1940—the first battleship aviation unit to receive OS2Us. White bands and black tail assembly. (Bottom) Second production OS2U-2 (BuNo. 2190) of VS-5D4 (Fourth Naval District), one of the then-new Inshore Patrol Squadrons which were formed in 1941–42. Naval Air Station Cape May, New Jersey, is recorded on the red fuselage band; cowling also red. Compare with side-view colour illustration No. 3. Later, for easier recall, these squadrons dropped the Naval Districts' coding to become, for example, simply VS-5.

(Photos: Vought Aeronautics via authors)

flew the Kingfisher on a tight schedule and within a short period of time, the OS2U had won acceptance by the Navy Department.

By the end of 1940, no fewer than 54 Kingfishers had been completed by the Vought-Sikorsky Division. Fifteen of these were sent to Naval Air Station Pensacola, Florida, six to the Pearl Harbor Battle Force and 12 to NAS Alameda, California.

OS2U-2—Following closely behind the OS2U-1, the -2 Kingfisher began to take shape and, before the end of 1940, the first two OS2U-2 examples had been delivered to the Navy. These were the first of 158 OS2U-2s that would see operational service with the Fleet. They were basically the same as the -1 but incorporated the later Pratt & Whitney R-985-50 radial.

Forty-six of these aircraft went to NAS Pensacola and 53 to NAS Jacksonville, Florida, to be used in the formation of the new Inshore Patrol Squadrons; for example, VS-1D1 and VS-2D1.

OS2U-3—The last production model of the Kingfisher was the -3 version. More of this type were built than any other model of the OS2U.

First deliveries of the -3 began in 1941 following the first flight by Boone Guyton at Stratford on May 17, 1941. The major improvements over the -1 and -2 were more fuel capacity and additional armour protection for the pilot and aircrewman.

The total production run of the OS2U Kingfisher amounted to 1,219 aircraft. Of this total, 55 were OS2U-1s (including the XOS2U-1), 158 were OS2U-2s and 1,006 were OS2U-3s.

OS2N-1—An additional 300 Kingfishers were built by the Naval Aircraft Factory in Philadelphia, Pennsylvania. These carried the designation OS2N-1.

Although the NAF built 300 Kingfishers there is documented evidence that they actually assembled a total of 31 extra of the type. The extra aircraft were apparently sent to the NAF for construction as they still maintained the Vought designation—OS2U (see Bureau Number list at end of this *Profile*).

KINGFISHER OPERATION

Shipboard operation of the OS2U differed a great deal from the shipboard operation of other aircraft in the US Fleet, excluding the Curtiss SOC Seagull biplane. Battleship and cruiser operations with the OS2U were not unconventional for the times but they were something a little bit different from that which most pilots would experience during their Navy careers.

Float-equipped Kingfishers serving on battleships, cruisers and some destroyers were, of necessity, catapult-launched. On most battleships and cruisers these stern catapults were located on the port and starboard sides.

Light cruisers of the *Omaha*-class (CL4 to CL13) had two catapults located side-by-side abaft the rear funnel. Each catapult was 68 ft. in length and held a tracked cradle in which the Kingfisher's float rested. With the floatplane's engine at maximum revolutions, a power charge—similar to that of a 5-inch shell—was fired putting the cradle into motion and the aircraft would be catapulted at about 70 m.p.h. to become airborne.

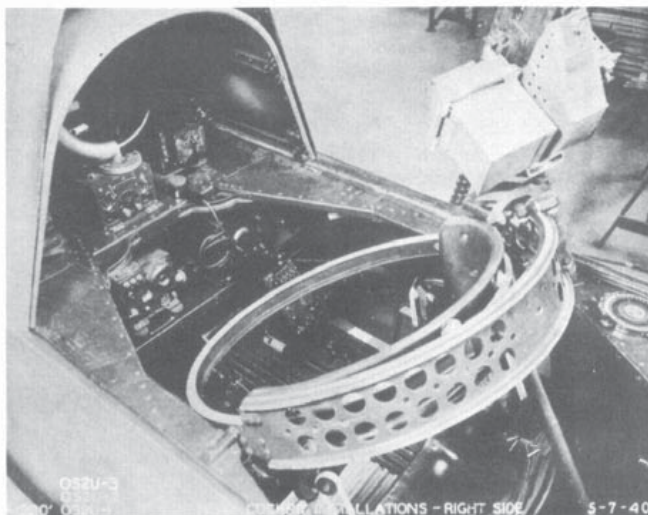
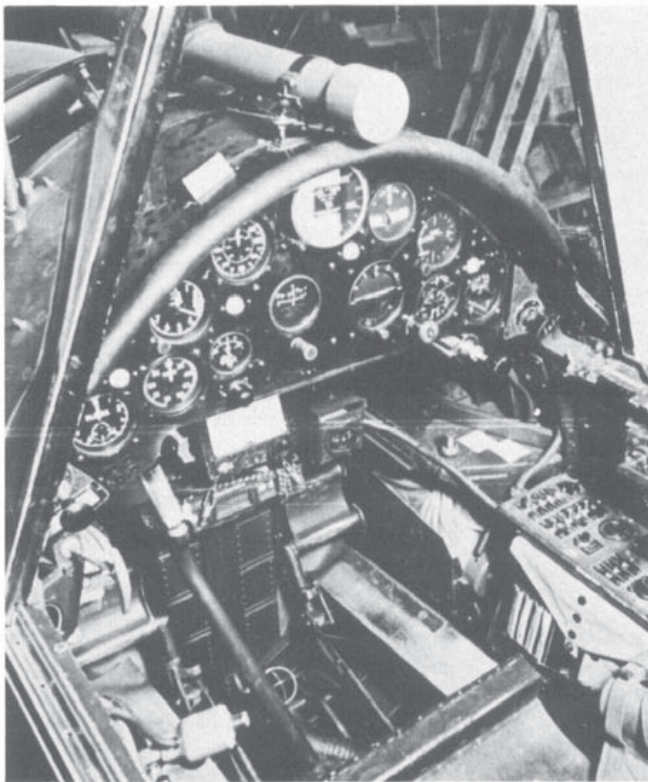
Launching procedure—In charge of the overall catapult operation was the Launching Officer. The personnel under his command were divided into four groups: (1) the floatplane crew; (2) the deck crew; (3) the catapult crew; and (4) the signal and communications crew.

The floatplane crew consisted of the skilled mechanics and riggers attached to the aviation unit on board the ship. Assuming the aircraft was ready to fly, this crew was responsible for securing the aircraft to the launching car. They were also in charge of fueling, oiling, equipping and testing the aircraft in accordance with the latest check-off list. They also manned the steadying lines and fending poles whenever the OS2U was being handled.

The deck crew consisted of about 10 men. They assisted the floatplane crew if needed and available. Their duties were to break down the rails on both sides of the deck far enough forward to be well clear of the catapult when it was trained and the aircraft was ready for launching. Also, they ensured that all booms, davits and so on were clear. As if the deck crew did not already have enough to keep them busy, they had also to rig the floatplane boom-and-snatch blocks and to assist in training the catapult.

The catapult crew consisted of five men and they were trained specifically to prepare and fire the catapult. The "cat crew" prepared the catapult for firing 30 minutes before the set launch time. Under the direction of the catapult officer, these men performed a multitude of duties. There was a catapult operator, brake operator, valve operator, pin operator and a crewman who trained the catapult into firing position.

Lastly, the signal and communication crew consisted of men responsible for all communications between the bridge and catapult, keeping the launching officer informed by both hand flags and telephone. They also kept in voice contact with the Kingfisher pilot.



Layout of pilot's cockpit and aircrewman's rear "office" were more or less standard for all models of US Navy OS2U/OS2Ns. The Aldis-type Telescopic Gun Sight Mark III Mod. 4 is set in the windshield, the pilot firing his single, engine-mounted 30-calibre (0.300-inch) Browning M-2 through the propeller arc. The aviation radioman's flexible rotating and tilting gun-ring shows the single Browning M-2 mounted. Fixed m.g. had 500 rounds and the flexible m.g. 600 rounds. Radio direction-finding D/F loop just visible top left of lower picture.

(Photos: Vought Aeronautics via authors)

The actual firing procedure of the aircraft was accomplished through a series of signals between the pilot and the men in charge of firing the catapult.

The pilot, waving his right arm in a circular motion, would declare "My engine is OK, and I am standing by to be launched". Upon receiving this signal, the catapult operator would move the control valve lever to the 45° position, equalizing the pressure on the piston valve. The crewman on the piston valve station would then open the handwheel to the "full" out position.

The catapult officer would then wave his left arm in a circular motion signifying "I am ready to fire on your signal". The pin operator would then remove the

securing pin from the release mechanism and hold it aloft for the pilot to see.

The pilot would then extend his arm horizontally and withdraw it; informing the catapult operator, "I am ready to be launched. You may fire when ready." The Kingfisher would then be launched into the air from the catapult.

During the catapulting operations a series of flag signals were being carried out between the catapult crew on the quarter-deck and the ship's bridge. A red flag or disc displayed on the bridge and acknowledged by a similar signal on the quarter-deck meant "Stand by to catapult plane(s) but do not catapult until further notice."

A green flag or disc signal from the bridge meant, "Catapult as soon as ready."

If a green flag or disc was shifted to red on the bridge, the quarter-deck would acknowledge by waving a green flag. As soon as the pilot and the valve control-man understood the order, the green flag would be shifted to red. This meant "Hold all catapulting."

A red flag waved vigorously from the bridge similarly answered by the quarter-deck meant, "Do not catapult any more planes."

Red and green flags waved together between the bridge and the quarter-deck was the signal to "Secure, no more catapulting."

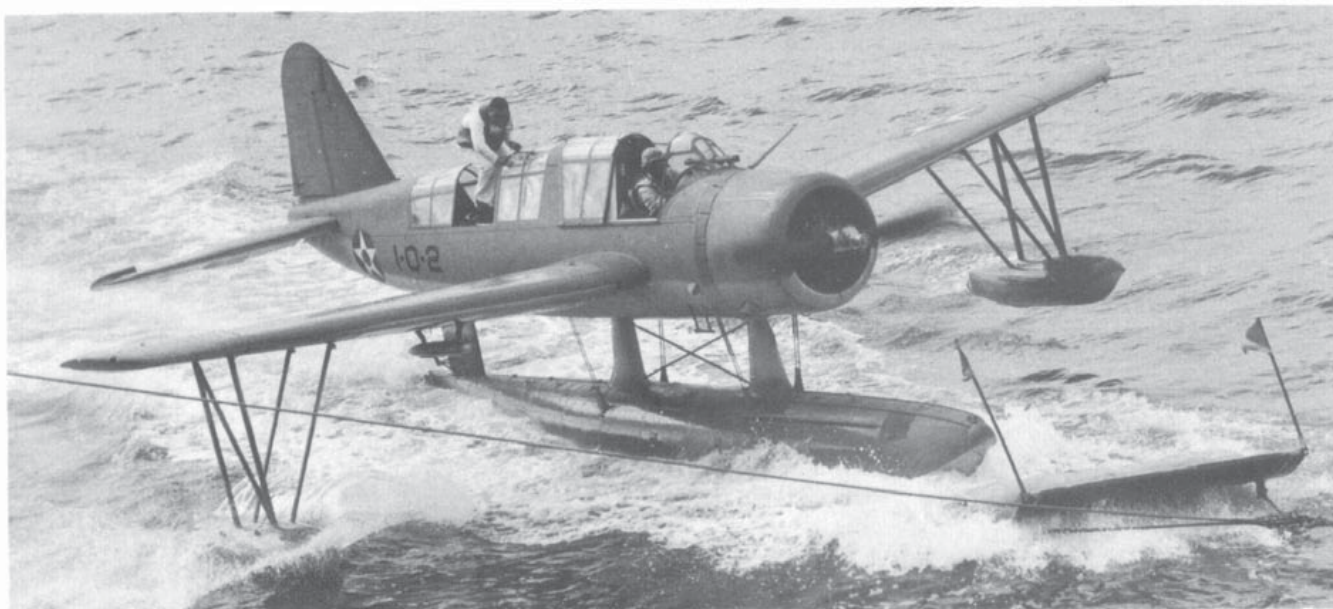
Recovering the OS2U, at sea, presented another lesson in teamwork and skill. The word given this exercise was "cast pickup". A tow pawl about six inches long was fitted on the keel of the forward end of the main float just at the waterline. A sled device was fitted to the recovery crane and hung in a position that enabled it to be towed by the ship. At the end of this 6-ft. wide sled was a 6-ft. length of cargo netting.

The recovery ship would turn sidewise and 45° into the wind, towing the sled. When the order to "execute" was initiated the ship turned with full rudder through the wind to a course 45° off the wind. This created a "slick" or relatively smooth surface on the sea for the OS2U to alight on. The pilot would then attempt to land his OS2U in this slick at a point close enough to the ship so that with full power he could then taxi up astern and place the nose of the Kingfisher's float on the sled as the ship completed its turn. As the Kingfisher hooked the cargo net attached to the sled, the pilot cut his engine and the rear-seat man—usually an Aviation Radioman—made ready to attach the hoisting sling from the crane to the lift point on the OS2U as the sled and aircraft were being towed alongside the ship.

In the recovery procedure, as in launching, a series of flag signals between the OS2U and the bridge were used to coordinate operations.

The Baker flag (all red in color), hoisted at flagstaff or on the aircraft boom, was to notify all aircraft to return to the vicinity of the ship in formation and wait for the signal to land. The numeral 6 on the searchlight signified recall and was used in addition to the Baker flag. The number 6 was also transmitted by radio to the aircraft and used in addition to the other two signals.

Baker two-blocked at flagstaff or on the aircraft boom and landing "tee" laid out on the quarter-deck told the pilot that manoeuvres were being made or were about to be made for the purpose of taking air-



Rare trio of OS2U-1s from Observation Squadron One (VO-1). Less than two months after these photographs were taken in October 1941, the host USS Arizona (BB39), Flagship of Battleship Division One, Battle Force, US Fleet, met its end by Japanese bombs and torpedoes at Pearl Harbor. Demonstrating the "Dog" (phonetic D) method of under-way, 10-knot, into wind sea recovery by engaging the 6-sq. ft. cargo-netting sled is "I-O-2" (BuNo.1696, delivered August 23, 1940). The aviation radioman is about to make the hazardous clamber forward to retrieve the hoist-sling stowed behind the pilot. For this tricky recovery manoeuvre, the pilot angled the radio mast to port. The second picture ("I-O-1", BuNo.1695, del. Aug. 22, '40) shows BB39's portside recovery hook. The third photograph ("I-O-3", BuNo.1697, del. Aug. 25, '40) reveals the crewman in the act of hoist-sling retrieving. Colour scheme: top surfaces non-specular blue-grey and similar non-reflecting light grey under-surfaces.

(Photos: Navy Dept., National Archives, refs. 80-G-66115, -66111 and -66108 respectively)

craft aboard. "Land in slick as soon as possible after formation is broken and prepare for hoisting."

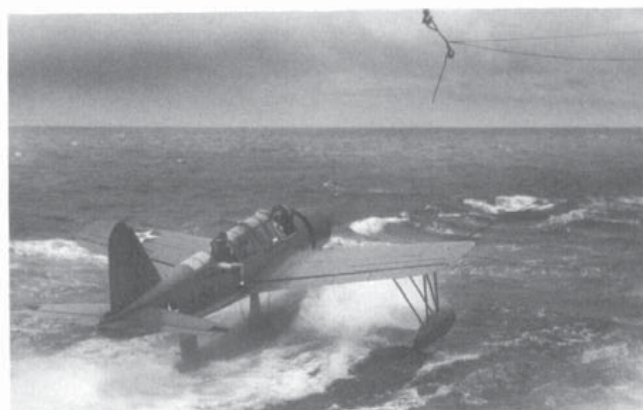
After the Kingfishers were pulled alongside, a red flag was placed on the bridge and then answered by the quarter-deck. This signal meant to stand by to be hoisted aboard but keep clear until the green flag is displayed.

As the green flag appeared on the bridge it was again answered by the quarter-deck. The pilot then manoeuvred his OS2U alongside and was hoisted aboard. When the quarter-deck waved a green flag back to the bridge, the last OS2U had been cleared from the water and the aft was now clear for using engines. The float-planes were then secured as the ship proceeded to its next location.

An additional set of signals between the ship and scout plane were used for various situations. If the Kingfisher came close to the ship and zoomed; then cut the engine off-and-on rapidly and flew away at low altitude on a steady course, this would be a signal to the ship that an aircraft was down and in need of assistance, "Follow me."

A white strip of canvas stretched across the OSU2 on the catapult told the pilot already in the air that this floatplane was delayed and he should not wait for it.

If the rear-seat man held his hand over his head it meant that he was trying to contact his visual sighting by radio. If he held his arm in a vertical position this meant "Radio out of commission." Finally, if he waved his arm over his head, this would be the signal to the ship that his receiver was not working and the ship should hoist the ADV flags if his voice transmission was coming through and the NDV flags if it were not.



Unit unidentified OS2U-3 post May 1942 when the horizontal red and white tail stripes and the red disc from the national insignia were deleted. (Photo: via Harry S. Gann)



THE OS2U AND THE US NAVY

Before America's entry into World War Two, the United States Navy had 17 battleships in commission plus the USS *Wyoming* (ex-BB32 which had been converted to a gunnery training ship, AG17) which carried no aircraft. The 17 battleships in the Fleet had been completely re-equipped with the OS2U by December 1941. All light cruisers of the *Omaha*-class (CL4 to CL13), also had the OS2U by that time.

Prior to the adoption of the Kingfisher, all US Fleet battleships (BBs) and heavy (CAs) and light (CLs) cruisers were using the Curtiss SOC Seagull. The coming of the Kingfisher did not mark the end of the SOC's career in the US Navy. For example, many Fleet heavy cruisers kept the SOC because limited storage facilities aboard were better suited to the wing-folding Seagull biplanes.

Battleships normally carried three OS2Us, while all cruisers carried four Kingfishers—an exception being the *Omaha*-class cruisers which carried only two floatplanes.

The aviation units aboard the battleships were comprised of units from VO-1 through VO-5 (Observation Squadrons), while those aboard the cruisers consisted of units from VCS-3 through VCS-9 (Cruiser Scouting Squadrons). The only two battleships that did not have a numbered VO unit aboard were USS *North Carolina* (BS55) and USS *Washington* (BB56).

Shortly after Pearl Harbor, the long time VO and VCS squadrons became a thing of the past. The aircraft and men became part of the ship's company with replacements being assigned to the ships as needed. The VO and VCS aviators and crews became the "lost men of naval aviation". When their ships put into a port where there happened to be a Naval Air Station, they often found that the station did not have an organization plan for their respective unit. More often than not, they were on their own. When spare parts were needed no-one seemed to know where they were. In consequence, the VO/VCS units had to resort to the well-known navy supply system of "midnight stores". If an item to keep "your" OS2U in the air was required, you "liberated" it after Lights Out.

OS2U DESTROYER OPERATIONS

A little-known episode in catapult-aircraft history

USS *Halford* (DD480) with OS2U on catapult; one of six destroyers of the Fletcher-class planned for aviation unit conversion in 1940. This rare photograph was taken on July 14, 1943 and is featured in the companion Warship Profile series—No. 9: USS *Charles Ausburne* (DD570). (Photo: US Navy)

relates to the US Navy's use of OS2Us aboard a few destroyers (DDs).

On May 27, 1940, the Secretary of the Navy approved an order for six destroyers of the *Fletcher*-class to be modified and equipped with catapults, floatplanes and other related equipment. The following destroyers were selected for the experiment: USS *Pringle*, *Stanley*, *Hutchins*, *Stevens*, *Halford* and *Leutze* (DD476 to DD481).

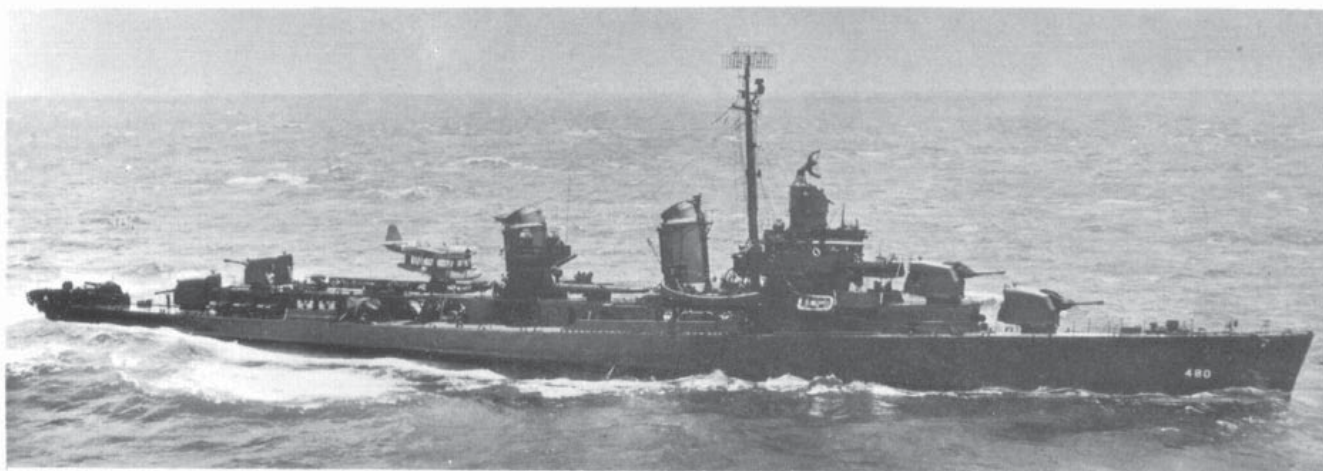
Earlier in 1940, the destroyer USS *Noa* (DD343) had conducted experiments with the Curtiss XSOC-1 floatplane. These operations were successful and eventually led to the May 27 order for the six *Fletcher*-class destroyers to have aircraft handling equipment installed.

The rotating catapult was placed where the number three main battery and after torpedo tubes were normally situated. A tank for aviation fuel was built on the main deck, aft of the superstructure. It held 1,780 gallons of aviation fuel and was surrounded by a cofferdam filled with CO₂ for safety purposes. The DD carried an aviation mechanic, an aviation ordnance-man and a pilot in addition to her regular crew.

Trouble which developed in the floatplane hoisting gear eventually led to the removal of the aircraft handling equipment from USS *Pringle*, *Hutchins* and *Stanley* between late-1942 and early-1943. USS *Stevens* and *Halford* actually had good success with their OS2Us. These two ships participated in the Marcus Islands actions. USS *Halford* took part in the Wake Island raids and *Stevens* helped in the Tarawa actions of late-1943.

Operating OS2Us on destroyers, though not unsuccessful, nevertheless did prove troublesome in the area of recovery. Destroyers could not effect the "Charlie" method of recovering aircraft because, unlike the battleships, could not form a slick big enough for the OS2Us to alight on. Consequently the destroyers had to use the "Baker" method of recovery which meant that the ship had to come to almost a complete standstill in order for the Kingfisher to be hoisted aboard. This might have been acceptable in peacetime but in a combat zone it could cause its share of problems.

Heavy seas also put a damper on DD aircraft recovery operations and in heavy swells damage to the





Pearl Harbor—I. Within Honolulu's Pearl Harbor lies Ford Island. This was the scene on the morning of December 8, 1941. US Navy OS2Us did not escape the fate meted out during the surprise attacks by aircraft of the Imperial Japanese Navy Air Force on Sunday, December 7. To the left of the wrecked OS2U and behind a truck is a possibly undamaged OS2U of Observation Squadron Two (VO-2) marked "2-0-3".
(Photo: Navy Dept., National Archives, ref. 80-G-32477)

aircraft almost always resulted when the floatplane was being hoisted. For example, the OS2U would be "bounced" against the after funnel.

Launching was always to the starboard side of the ship, 360° training of the catapult could not be accomplished. Recovery was always to port. The stowage of the aviation fuel onboard was another headache involved in operating OS2Us from destroyers. In December 1943, both USS *Stevens* and *Halford* had their aircraft handling equipment removed and the short era of floatplanes on destroyers came to an end. USS *Leutze* never received aircraft handling gear.

OS2Us OTHER DUTIES

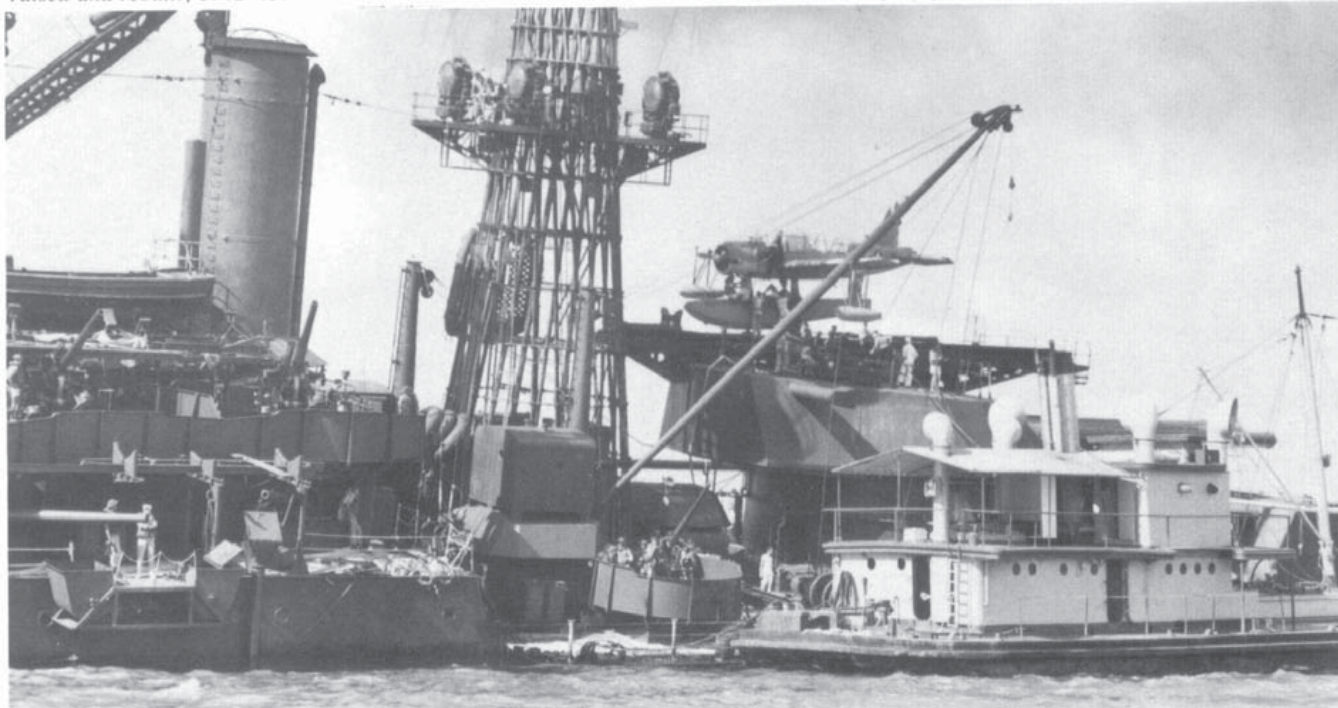
The Kingfishers that were assigned to the battleships and cruisers provided much-needed service during the

early stages of US involvement in World War Two. With an extreme shortage of aircraft carriers, protection still had to be maintained for the numerous Atlantic and Pacific convoys. Battleships and cruisers assigned to convoy duty also provided the tactically and psychologically important "air umbrella". A constant patrol was kept throughout the daylight hours and each OS2U was equipped with either two 350-lb. depth bombs or general-purpose bombs.

In the event that an enemy submarine was spotted, the Kingfisher would engage it until the convoy's escorting destroyers could close-in and, hopefully, make the "kill".

The Kingfisher also became the "eyes" of the battleship's and cruiser's big guns during the bombardment of shore installations. Many times they provided

Pearl Harbor—II. Same period as above, a seemingly and amazingly undamaged OS2U on the single catapult aboard the sunken battleship USS California (BB44). Ship's gun crews are manning the anti-aircraft 5-inch-38s (i.e. size-calibre). The battleship was raised and rebuilt, 1942-43.
(Photo: Navy Dept., National Archives, ref. 80-G-32423)



the location of the enemy fleet while being used as a search aircraft.

Perhaps the most important rôle the Kingfisher performed during the war was that of rescuer of downed airmen. The OS2U was second only to the reliable old Consolidated PBY Catalina in this function.

Kingfisher pilots flew in all types of weather. Often they would be launched on a relatively clear and calm day, only to return to find the weather conditions foul and the sea rough and choppy. They also faced the possibility of returning to the ship's plotted position only to find it nowhere in sight. The OS2U pilots would then have to fly a square-search pattern. It was almost always impossible for the ship to send out a radio signal for the pilot to home in on because radio silence had to be observed. Good navigation plus luck were all the OS2U pilots had going for them in this kind of situation.

US Navy Kingfishers were also assigned to several Fleet Auxiliary Seaplane Tenders and, by December 1941, no fewer than 14 OS2Us were in service with eight such ships. For example, the large seaplane tender USS *Tangier* (AV8) had been assigned a trio of Kingfishers and was part of Patrol Wing Two at Pearl Harbor.

In September 1940, the first of the new Inshore Patrol Squadrons, VS-5D4, was commissioned and allocated OS2Us. Before the end of 1942 a total of 30

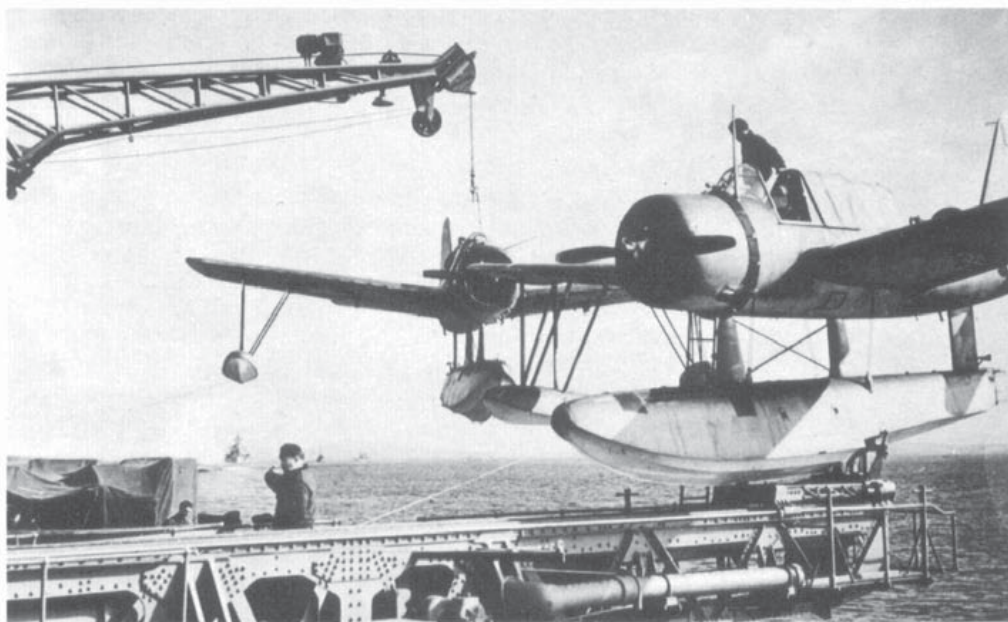
Key to colour illustrations

- 1 Vought-Sikorsky OS2U-2 (BuNo.2216) of the US Navy's Patrol Wing Two, Pearl Harbor, Hawaii, assigned to the seaplane tender USS *Tangier* (AV8) in 1941.
- 2 OS2U-1 (BuNo.1691) in "Command Plane" colours for the Commander-in-Chief, US Fleet, aboard the flagship USS *Pennsylvania* (BB38), 1941.
- 3 OS2U-2 of Inshore Patrol Squadron VS-5D4, Naval Air Station Cape May, New Jersey, 1942.

Inshore Patrol Squadrons was to be in operation with Kingfishers. The majority of these squadrons flew the Naval Aircraft Factory OS2N-1 duplicate of the OS2U-3. The Kingfisher also served with the US Coast Guard Inshore Patrol Squadrons. The first of 53 Coast Guard Kingfishers were received in early 1942; but all remaining USCG Kingfishers were relinquished by 1944.

On January 23, 1942, the Kingfishers of VS-1D14 became the first US Navy aircraft to operate from the Samoan Islands.

One of the first recorded uses of the OS2U as a glide or low-level bomber—carrying 350-lb. bombs



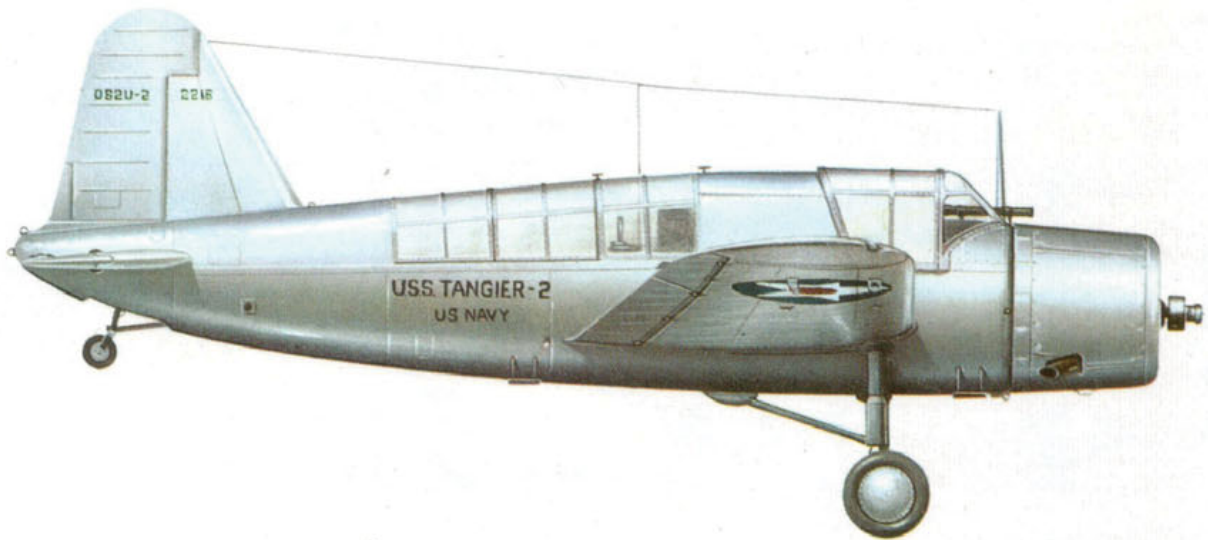
(Left) OS2U-3s aboard a US Navy battleship, part of a task force serving with the British Home Fleet. Period, December 1943.



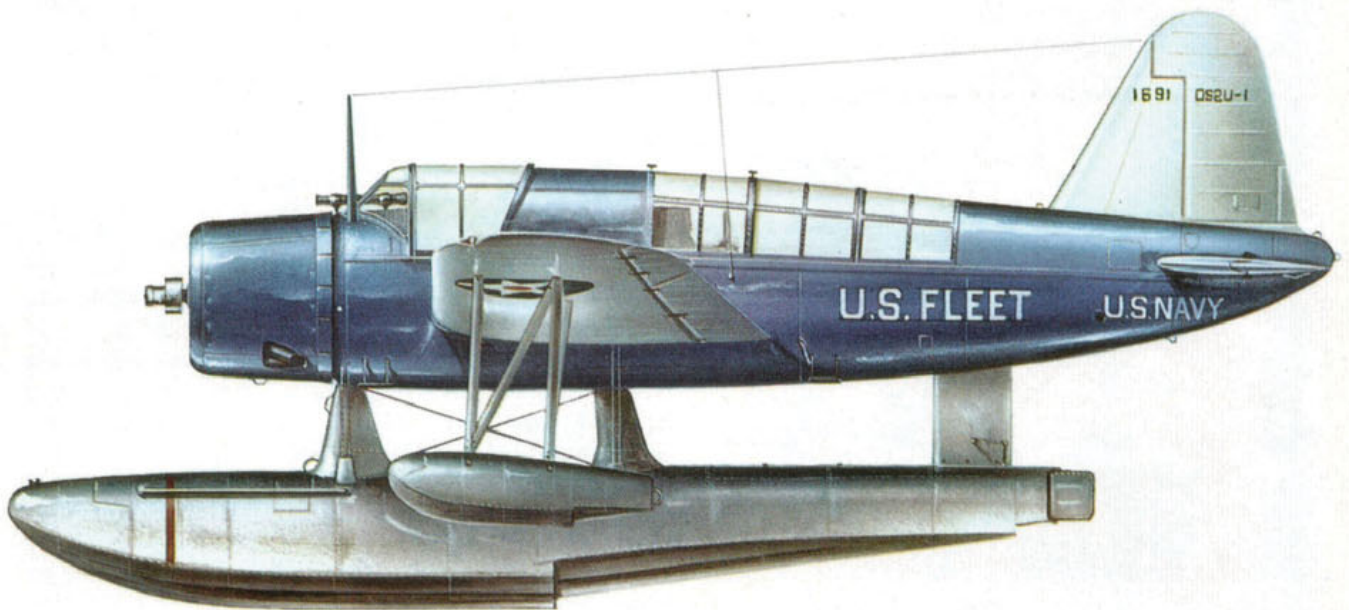
Wearing the uniform of an Admiral of the Fleet, H.M. King George VI toured USS Washington (BB56, commissioned May 15, 1941) when it was attached to the British Home Fleet in Atlantic waters in 1942. The "at rest" securing struts on the OS2U-3s are noteworthy.

(Photos: Imperial War Museum, ref. A.17647/XF)

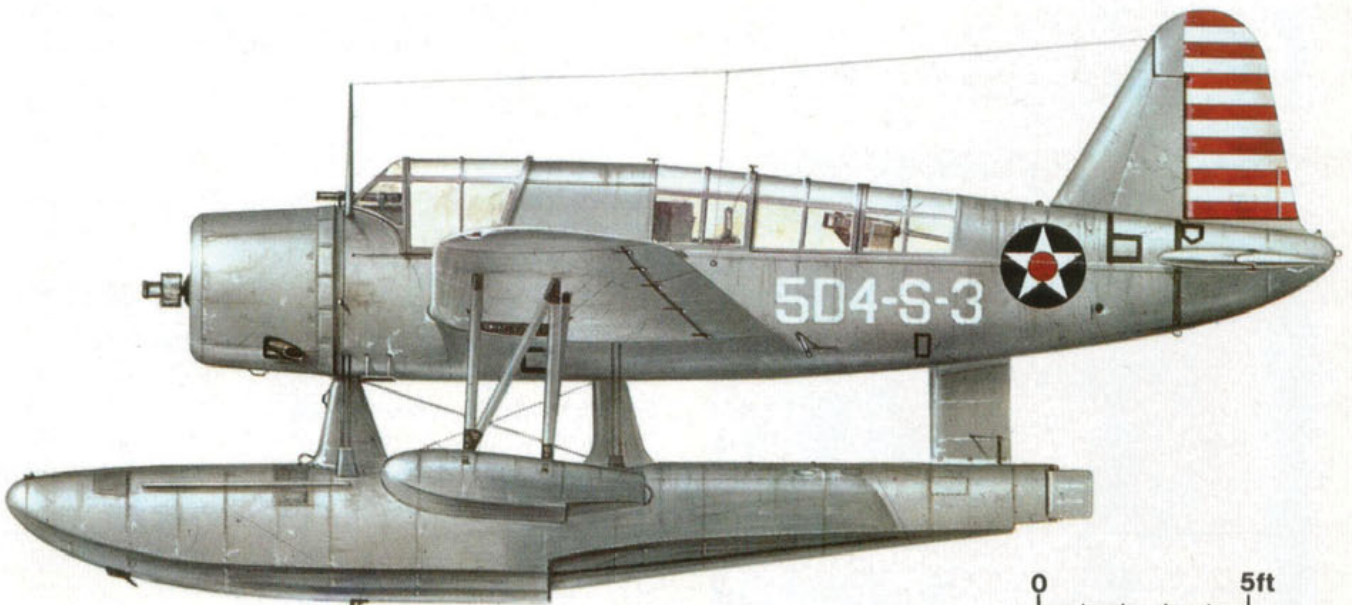
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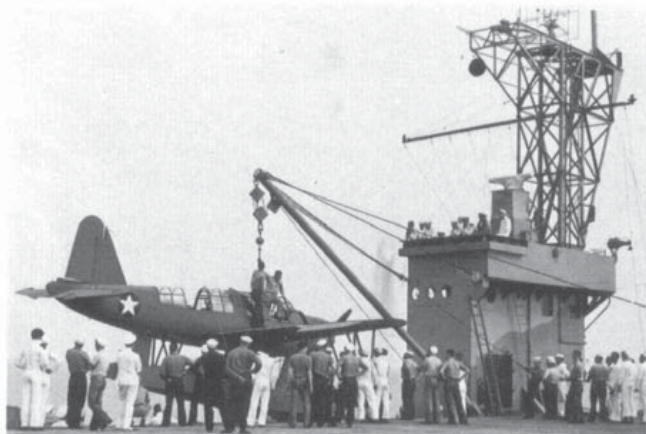
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Subject of colour illustration No. 3 on the previous page, this OS2U-2 of Inshore Patrol Squadron VS-5D4 was based at NAS Cape May, N.J., in early 1942. This OS2U displays the rare combination of markings and paint scheme. Non-specular light-grey overall, white unit code letters and red and white tail stripes as directed by the Bureau of Aeronautics in January 1942 but some 2½ months after the grey-overall scheme had been abandoned. (Photo: via Harry S. Gann)

instead of the lighter stores for which they had been designed—was in connection with the initial assault against the Japanese based on Attu in the Aleutians in the second half of 1942. “With conspicuous success they came through in characteristic Vought style.”*

**Wings for the Navy*—A history of Chance Vought Aircraft.

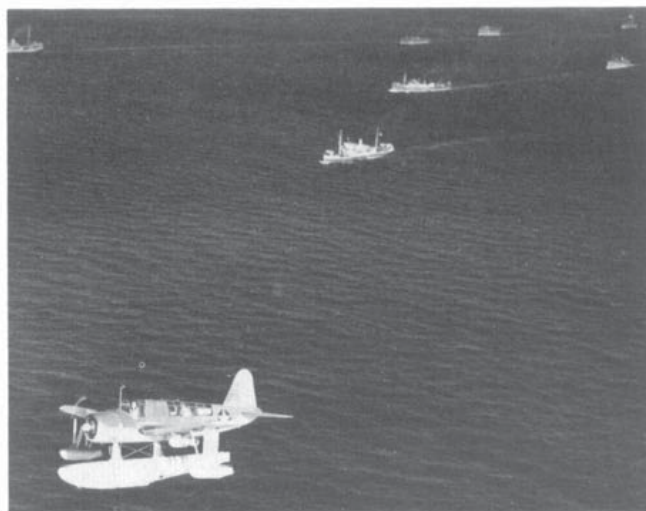


The escort carrier USS Charger (CVE30, ex-passenger/cargo MS Rio de la Plata, and as British Royal Navy name suggests, originally earmarked for R.N. but retained after Pearl Harbor), shows crew undergoing training in hoisting aboard an OS2U in June 1942, three months after commissioning. CVE30 was only employed for CVE training.

(Photo: Navy Dept. ref. 28440 via H. S. Gann)

Atlantic convoy patrol by a U.S. Coast Guard OS2U-3 in mid-1942. Note heavy depth charge under wing.

(Photo: U.S. Coast Guard, ref. 1655)



On July 15, 1942, two Kingfishers (Ensigns Frank C. Lewis and Charles D. Webb) of VS-9D4, NAS Cherry Point, N. Carolina, assisted the Fleet Auxiliary, USS *Unicoi* (IX216) in sinking the German submarine U-576. The action took place off Diamond Shoals, east of Cape Hatteras—better known as “The Graveyard of the Atlantic”.

RESCUE KINGFISHERS

For the Kingfisher, and despite all its valuable combat rôles around the world, only one event was to bring it into dramatic public focus. Late in October 1942, a US Army Air Forces' Boeing B-17 Flying Fortress was forced to “ditch” in the Pacific. For nearly three weeks, the US Navy carried out an unrelenting search for the eight missing airmen. One of those missing was Captain Eddie V. Rickenbacker, Congressional Medal of Honor, America's highest-scoring World War One “ace” and then (1942) virtually a household name. Enter “The Bug”.

“The Bug” was an OS2U which had rolled-off the assembly line in mid-1941 and had been assigned to “the veteran battlewagon of the Pacific Fleet”,* the battleship USS *Pennsylvania* (BB38) first commissioned in 1916. At Pearl Harbor during the Japanese attack in December 1941, the OS2U escaped major damage. Rapidly effected repairs allowed “The Bug” to take-off at dawn on December 8 in search of the Japanese Fleet. Without avail.

Eventually, “The Bug” was transferred to another scouting squadron and when American forces occupied Ellice Islands, “The Bug” was there. In a matter of weeks, “The Bug” was searching the South Pacific for the missing B-17 crewmen. Then, on November 11, 1942, success. Flying “The Bug” was Lieutenant (jg) F. E. Woodward with the rear cockpit occupied by L. H. Boutte, AR/1c (Aviation Radioman First Class). They alighted near a spread of yellow marker dye and the rescue of the B-17's crew began with Captain W. T. Cherry and four others.

Just before nightfall on the next day, “The Bug” had its best day. The raft with Eddie Rickenbacker and the two remaining crew was discovered. Volunteers to attempt an immediate rescue were sought and Lieutenant William F. Eadie won the assignment. Once again Radioman Boutte went along “for the

*Chance Vought's (1943) *Wings for the Navy*.

Circuits and bumps. At Naval Air Station Pensacola, Florida, a training OS2U-1 with novel embarking ramp. Florida's famed sunshine is responsible for the smart headgear. In the background, two Consolidated P2Y-2 obsolescent patrol flying-boats used for training with VN-4D8 (Eighth Naval District). (Photo: from colour transparency by Art Schoeni)



ride". Unable to fly all three survivors back at one go, the decision was taken to taxi the OS2U back to the nearest land—40 gruelling miles distant—with Rickenbacker and one B-17 crewman lashed to the wings while the most seriously-ill second B-17 crewman was placed in the back seat on AR/1c Boutte's lap. With 1,100 flying hours already logged, "The Bug" flew on—the most famous Kingfisher of the Pacific War.

KINGFISHER IN MAJOR ACTIONS

Kingfishers took part in all the major actions of the Pacific War. From Guadalcanal to the Marshalls, the Gilberts, the Marianas, the Philippines and on to Iwo Jima and Okinawa. They stalked the Japanese Fleet, and provided observation for ground troops as well as their own ships. They also acted out their "guardian angel" rôle by rescuing many downed pilots from the Fast Carrier Forces.

At Tarawa, the OS2U was responsible for the neutralization of Bairiki Island. On November 21, 1943, a Kingfisher dropped a bomb on the island. This scored a direct hit on a drum of gasoline which exploded and killed the entire 15-man occupation force on the island.

In April 1944, as the US Fleet was starting its assault on the Japanese stronghold of Truk, little resistance from enemy aircraft was found. However, the anti-aircraft fire from the island was intense. Kingfishers from the battleship USS *North Carolina* (BB55) had been assigned to rescue work.

On April 30, the second day of the bombardment, the two Kingfisher crews were alerted that a pilot from the USS *Enterprise* (CV6), had "ditched" at sea. Within an hour the two OS2Us were circling over the pilot, Lieutenant (jg) Bob Kanze. One of the Kingfishers, flown by Lieutenant (jg) J. J. Dowdle with R. E. Hill in the rear seat, managed to alight and taxi over to Kanze. The water was rough. As Kanze grabbed the wing float, his raft was swept away. Almost immediately a wave pushed into the side of Dowdle's OS2U and, with Kanze's weight on the float, the Kingfisher capsized throwing Dowdle and Hill into the choppy sea as well.

The three men were able to recover the life raft as the second OS2U, piloted by Lieutenant (jg) John A. Burns (rear-gunner, Aubrey J. Gill) banked overhead. Burns had observed the situation and began to make the tricky approach to the choppy sea. Alighting

successfully, he taxied over to the raft. Very carefully Burns and his gunner helped the men aboard. To balance the floatplane, Kanze was placed on one wing and Dowdle on the other while Hill hung on the fuselage. With the increased load Burns was unable to take-off, so he taxied to the rescue submarine USS *Tang* (SS306) where he deposited his very soggy passengers. Dowdle's OS2U was then destroyed by SS306's guns to keep it from the enemy.

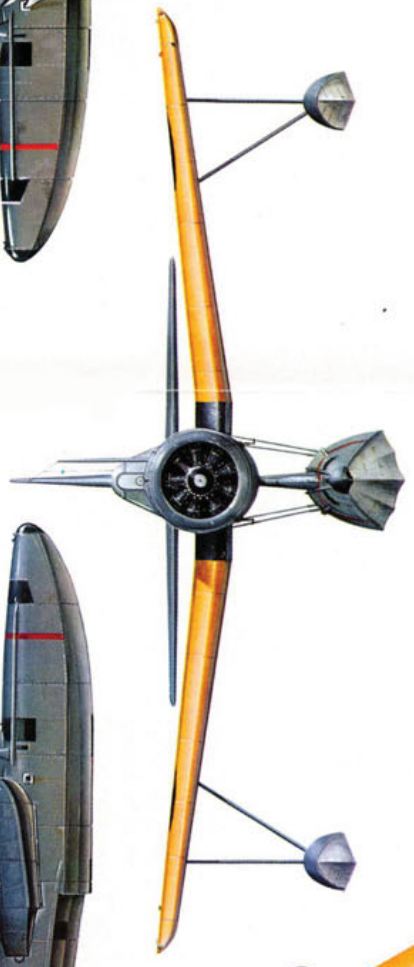
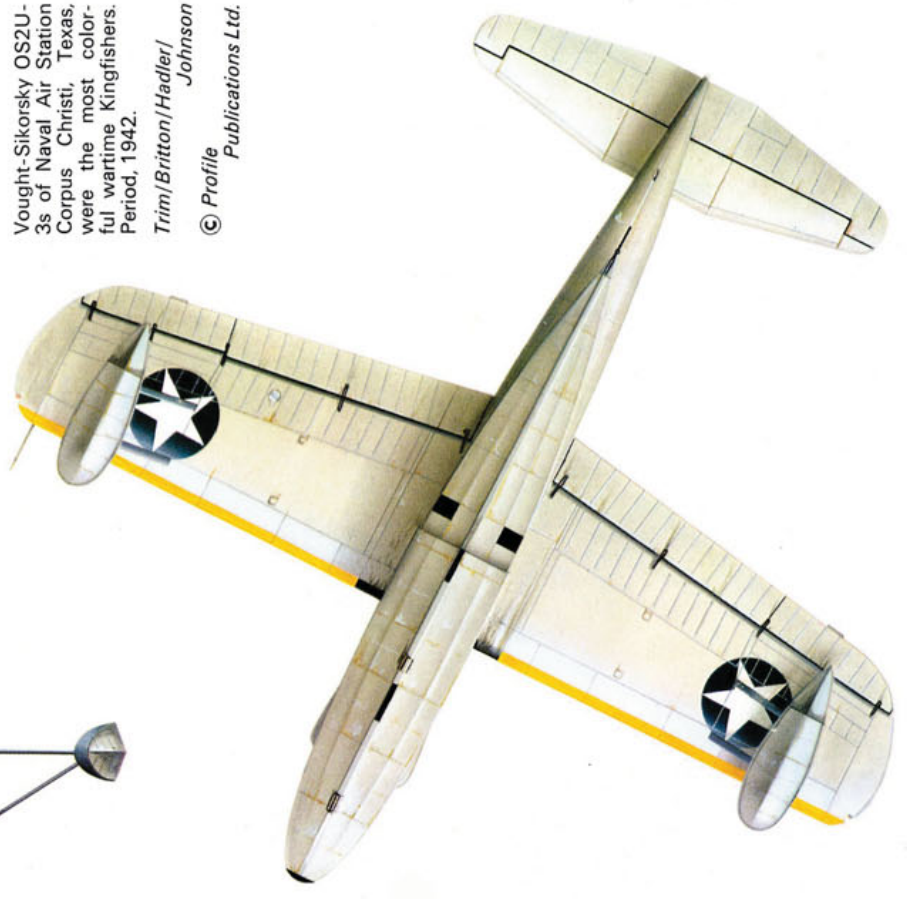
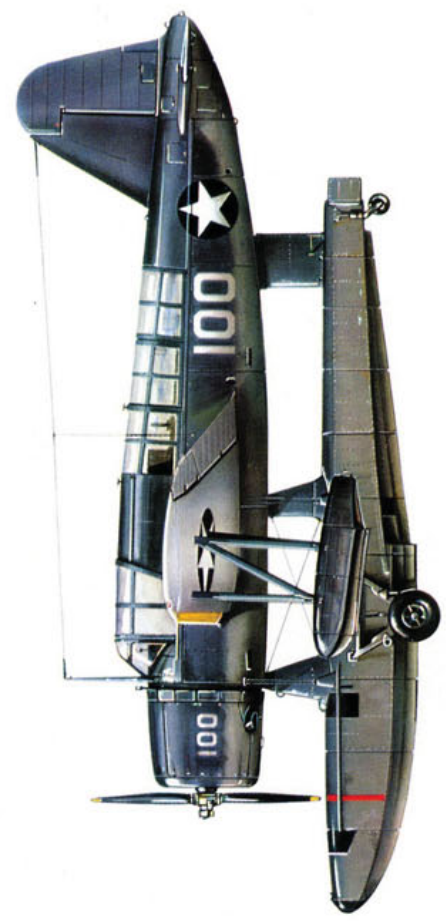
Burns was then directed to the east where another

Subject of the colour 5-view on the following two pages, echelon to starboard of four OS2U-3s used for pilot training (no crewmen are aboard) at NAS Corpus Christi, on the Gulf of Mexico, Texas. (Photo: Navy Dept., National Archives, ref. 80-G-10554)



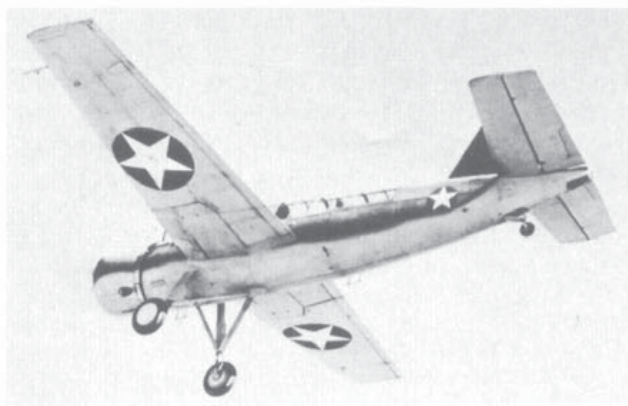
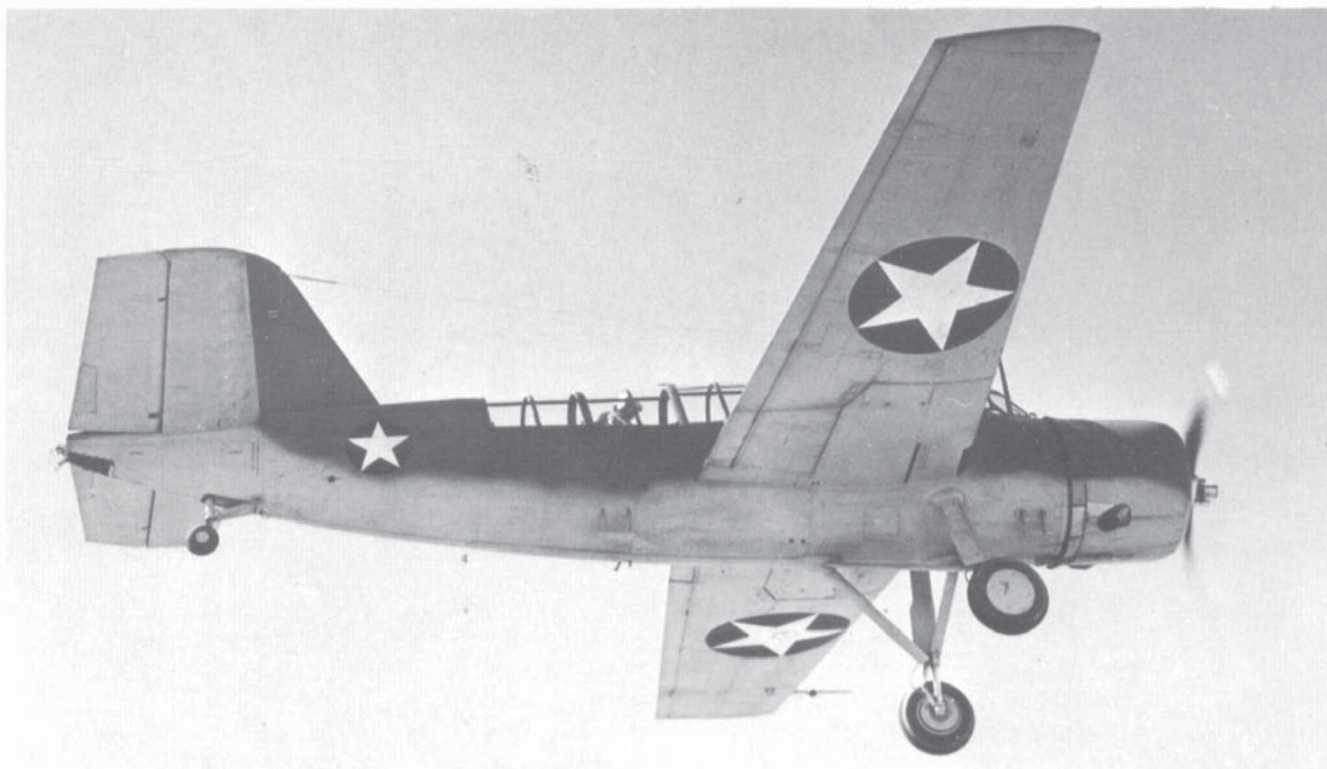
Vought-Sikorsky OS2U-3s of Naval Air Station Corpus Christi, Texas, were the most colorful wartime Kingfishers. Period, 1942.

Trim/Britton/Hadler/Johnson
© Profile Publications Ltd.



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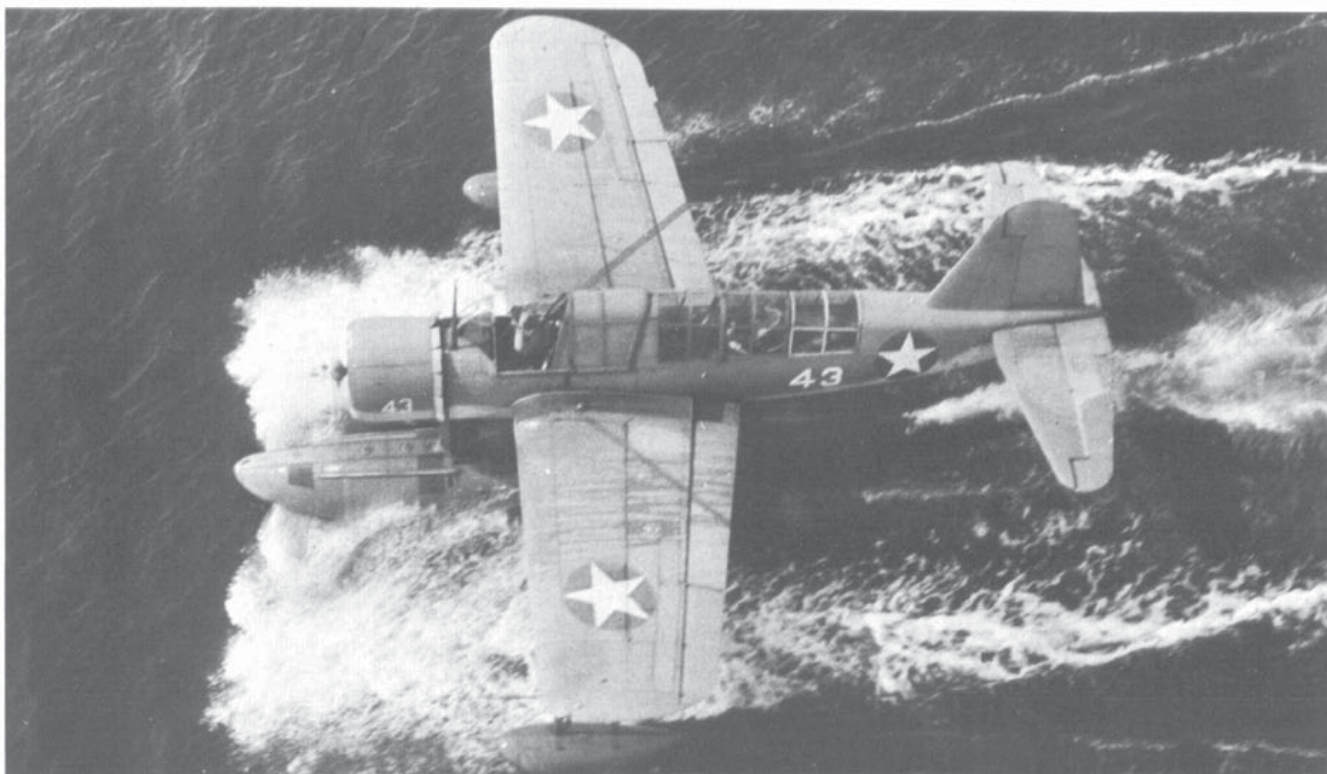
Rare bird. A standard OS2U-2 fuselage but with a difference. Experimental blunt-tipped wing incorporating "Zap" narrow-chord, full-span flaps and wing-folding facility. New wing resulted in enlarged-area horizontal stabilizer or tailplane.
(Photo: Douglas, El Segundo, ref. 21691 via Harry S. Gann)

Another view of one of the two experimental OS2U-2s (BuNos. 2189 and 3075). Black area in tail cone is housing for test anti-spin parachute. Both photographs show the Kingfisher's normally retracted footrests to advantage.

(Photo: Vought Aeronautics via Art Schoeni)

Wartime Kingfisher, with pre-war chevron marks on the wings, during exercises in late 1942. Aircraft number is repeated on cowling sides and top of cowling collector ring. (NB: Another fine view of this OS2U-3 appears on the last page of this Profile, but that one was not received by the British I.W.M. until May 1944 from the U.S. Office of War Information—EDITOR).

(Photo: via Lloyd S. Jones)



On patrol over the Caribbean in 1942, a Kingfisher of the US Marine Corps; in this case Marine Scouting Squadron Three (VMS-3) stationed at St. Thomas, Virgin Islands. Large depth charge is in evidence and rear crewman's 30-cal. Browning M-2 is in the stowed position. (Photo: Defense Dept., USMC ref. 51927)



pilot was reported down. The *Tang* had also been directed to cover rescue operations in the eastern waters of the atoll.

Burns found the downed aviator, Lieutenant Robert T. Barbor from the Light carrier, USS *Langley* (CVL27), and picked him up. Barbor sitting in the rear seat with Gill created too much weight for the OS2U to take-off in the rough sea. Burns decided to wait for the *Tang*, which had radioed that it was on the way. The three men in the Kingfisher sat and observed the carrier pilots from the Fleet continue their aerial assault on Truk.

As they watched, two Grumman TBM Avengers—piloted by Lt. Robert S. Nelson and Ensign Carroll L. Farrell—received hits from the anti-aircraft fire on Truk. The two TBMs had to “ditch”. Burns decided he would try to reach the stricken Avengers’ crews. He reached them in about 30 minutes. Finding Nelson’s raft first, also with Joseph Hranek and Owen T. Tabrum aboard, Burns tossed them a life line. Towing the raft he then proceeded to the other raft containing Farrell and his crew, Robert W. Gruebel and James L. Livingston. After throwing them a line he attempted to tow both rafts to safety. This proved impractical because as soon as Burns started to increase his engine power, the backwash and spray soaked the six men. Also the weight produced tremendous drag on the aircraft.

Burns then transferred all six men to the Kingfisher, placing some on the wings and others on the fuselage to balance the load and keep the OS2U from capsizing. Burns then began taxiing his Kingfisher to the awaiting USS *Tang*. Before he reached the submarine there was an emergency call and the *Tang* disappeared beneath the waves.

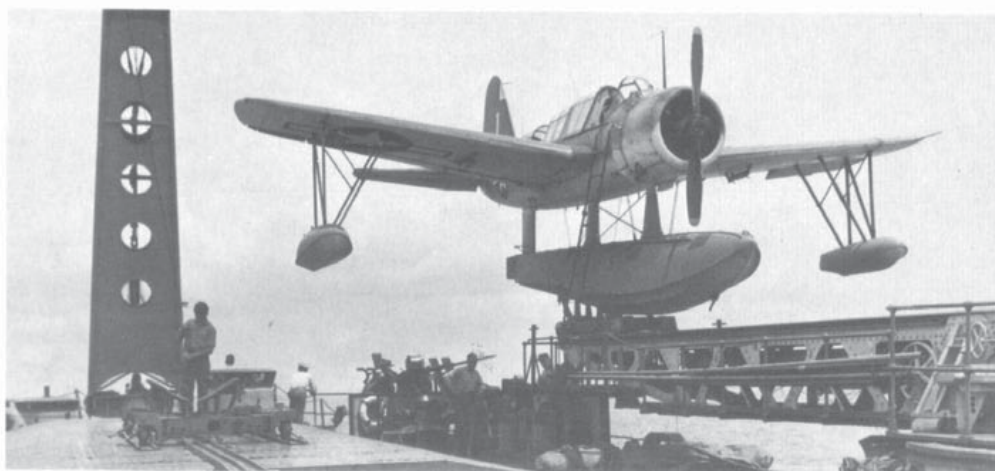
After rescuing another pilot who had alighted close to shore, the submarine *Tang* returned to Burns’ OS2U. The Kingfisher had started to take on water in the main float and was listing badly. All nine aviators were taken aboard the *Tang*. Before leaving the area, the submarine’s guns had to destroy the Kingfisher that had worked so hard that day in picking-up no fewer than 10 downed American aviators.

KINGFISHER v. ZERO-SEN

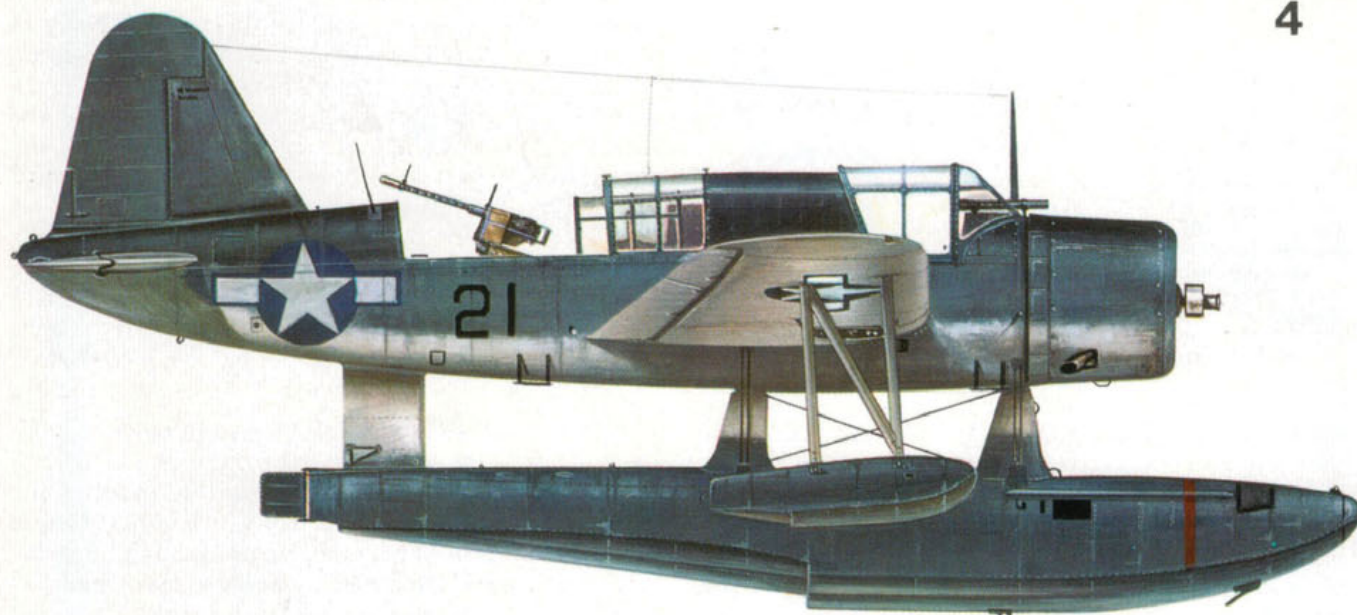
The Kingfisher also was responsible for the downing of at least one Japanese Mitsubishi *Zero-Sen* fighter. On February 16, 1945, three days before the landing on Iwo Jima, an OS2U from the heavy cruiser USS *Pensacola* (CA24), flown by Lt. (jg) D. W. Gandy, was spotting gunfire for the pre-invasion bombardment. At 1,500 ft. a *Zero-Sen* dived on the OS2U, fired a short burst and turned away. Lieutenant Gandy turned his Kingfisher to the left, then to the right, which placed him on the tail of the enemy fighter. He began firing on the *Zero-Sen* with his calibre 30 (0.300-in.) Browning M-2 forward-firing machine-gun. The fighter began to smoke and attempted to turn away from the on-rushing OS2U. Gandy continued to fire into the smoking Zero until it burst into flames and crashed into an island bluff.

The Vought-Sikorsky OS2U Kingfisher had transversed the entire length of the US participation in World War Two. She had been in on the beginning at Pearl Harbor on December 7, 1941 and she was aboard the battleship USS *Missouri* (BB63) when the surrender was officially signed in Tokyo Bay on September 1945. The Kingfisher served the Navy for only a short few months after the war, by 1947 the OS2U was only a memory in the US Fleet.

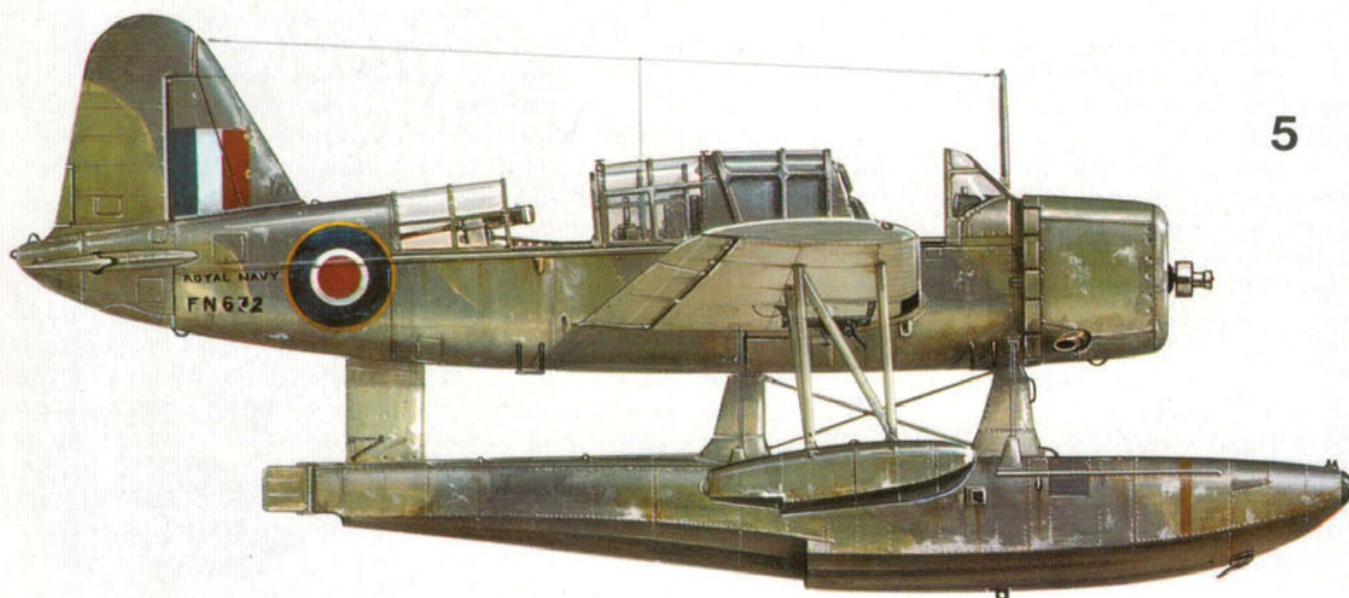
Revised national insignia shows to advantage in this photograph taken on June 8, 1945 at Okinawa, aboard a US Navy Light cruiser (CL category). Embarkation ladder is in position but the “at rest” securing struts are stowed alongside the catapult. Aft is a single 450 rounds-per-minute 20-mm. Oerlikon anti-aircraft machine-gun; Navy does not call it “cannon”. (Photo: Defense Dept., USMC, ref. 125485)



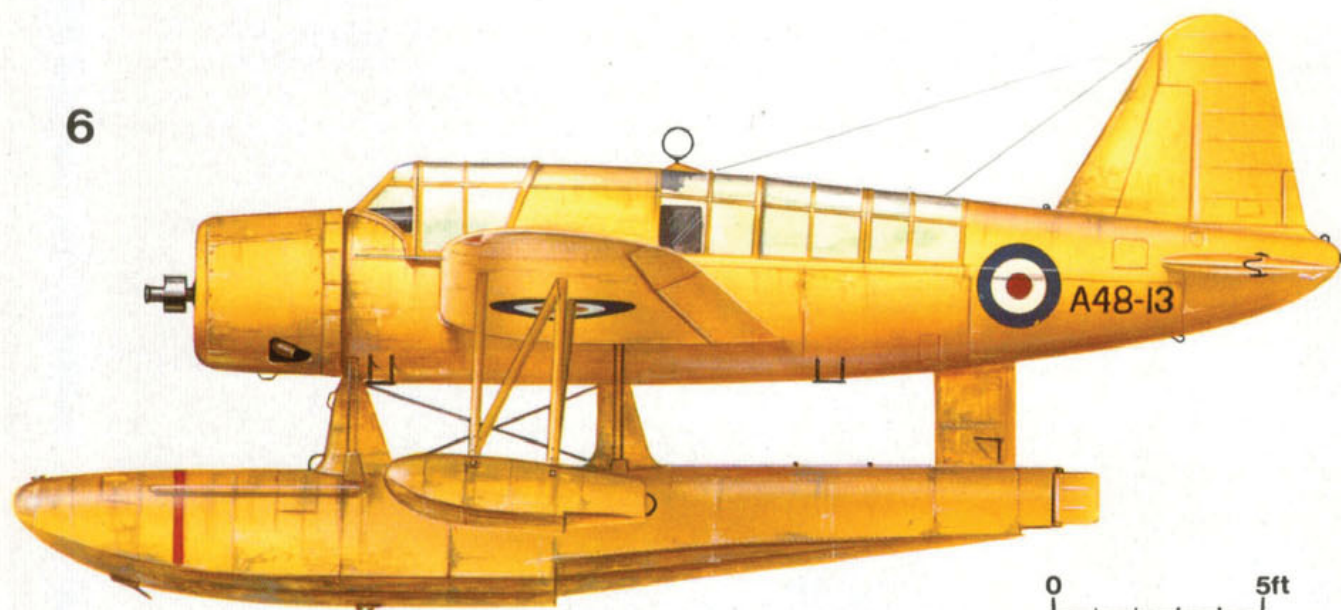
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Key to colour illustrations

- 4 The code "21" indicates that this 1945-period OS2U-3 was Plane No. 1 of Battle Division Two; it was assigned to USS *Tennessee* (BB43).
- 5 British Royal Navy Kingfisher I (serial FN672) which was attached to the catapult-aircraft training carrier HMS *Pegasus* (ex-*Ark Royal*) in 1942.
- 6 OS2U-3 Kingfisher I (A48-13), which took part in the Australian Antarctic Expedition of 1947-48.

KINGFISHER IN THE ROYAL NAVY

The OS2U began its career in the Royal Navy in mid-May 1942. The Kingfisher was slated to re-equip certain light cruisers and Armed Merchant Cruiser Catapult Flights. These ships could not handle the heavier pusher amphibian Supermarine Walrus, the standard catapult aircraft of the RN, because they were fitted with a Light Series catapult capable of launching only aircraft of up to 5,500 pounds.

The Kingfisher's predecessor, the British Fairey Seafox—comparatively fragile and underpowered—had no British replacement so two US Navy types were requested. The Ranger air-cooled inverted-Vee inline-powered Curtiss SO3C Seagull (RN: Seamew) and the Vought OS2U were evaluated. The Seamew failed



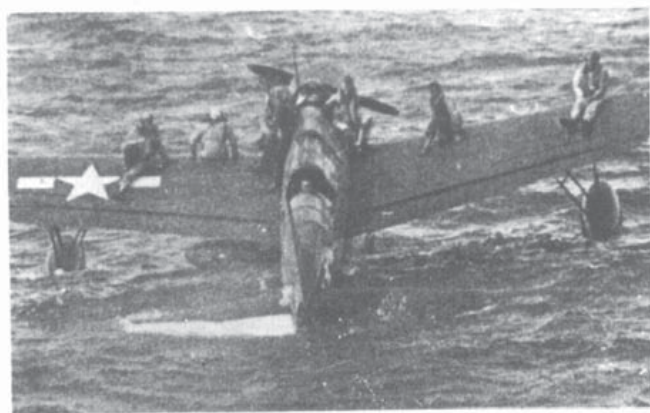
Two excellent views of unit-unidentified OS2U-3s. Fin emblem (above) shows "Donald Duck" in sailor's rig and holding a telescope. From paint weathering both OS2Us appear to have been long-service Kingfishers. The spinner (lower view) is non-standard.

(Photos: via Lloyd S. Jones and Fred C. Dickey, Jr.)



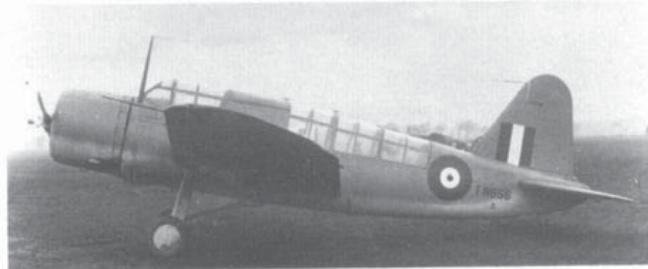


Rescue I. Nothing is known as to whether this was a genuine rescue re-enactment or merely a training exercise (the facial expressions suggest gloom!) or even where and when the photograph was taken. The non-specular white underside colour demarcation line is unusually high on the fuselage of this OS2U-3. (Photo: via Lloyd S. Jones)



Rescue II. This was a genuine rescue, one of the famous incidents described in this Profile. Seven rescued aviators are on the wings of Lieutenant (jg) John A. Burns' OS2U-3 at Truk Atoll, April 30, 1944. (Photo: US Navy, ref. 15202 via Art Schoeni)

Royal Navy Kingfisher Is. Two views of landplane Royal Navy OS2U-3, serial FN656 (ex-BuNo.5817) in England, April 1942. Red and blue B-type British roundels under wings are non-standard. Floatplane Kingfisher I of the same period is another OS2U-3, serial FN678 (ex-BuNo.5839). Orthochromatic film gives false reading to outer yellow circle of red, white and blue fuselage roundel. Side view of FN656 reveals a Hawker Hurricane Mk. I (W9187) in the background. (Photos: I.W.M., refs. A.10847C and B:FN656 and A.10848E and F:FN678)



completely as far as the Royal Navy was concerned and in early 1942 the Kingfisher made the team.

The first OS2Us were ferried to the United Kingdom aboard the aircraft carrier HMS *Furious* and in mid-May 1942, 703 Squadron was formed at Lee-on-Solent. This provided a headquarters unit for the Kingfisher Flights, the first of which was 703 *Fidelity* Flight. This Flight worked at Lee and then on the river Tay at Dundee with one Kingfisher.

On June 1, 1942, *Ranpura* Flight was formed with two aircraft. Two months later, August, this Flight was re-assigned to *Cilicia* and redesignated accordingly. On August 15, 1942, two more Flights were formed; *Canton* and *Corfu*.

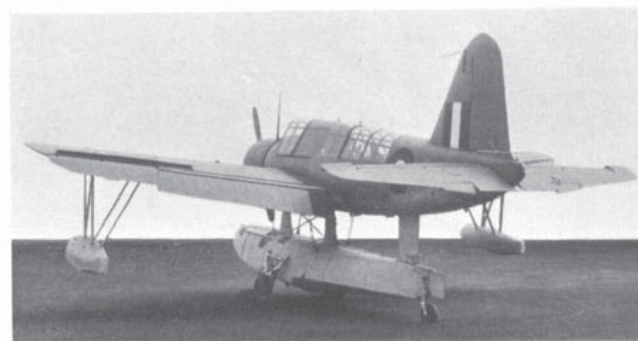
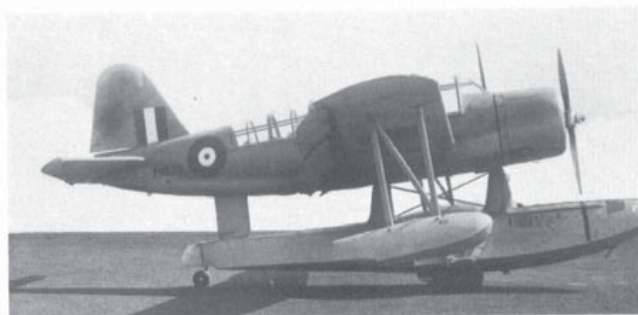
These Flights all saw service with Armed Merchant Cruisers. The *Fidelity* however, was classified a "Special Service Vessel" and was used for a variety of special operations. *Corfu*, *Cilicia* and *Canton* were ex-P & O liners and saw service in the Indian and South Atlantic Oceans.

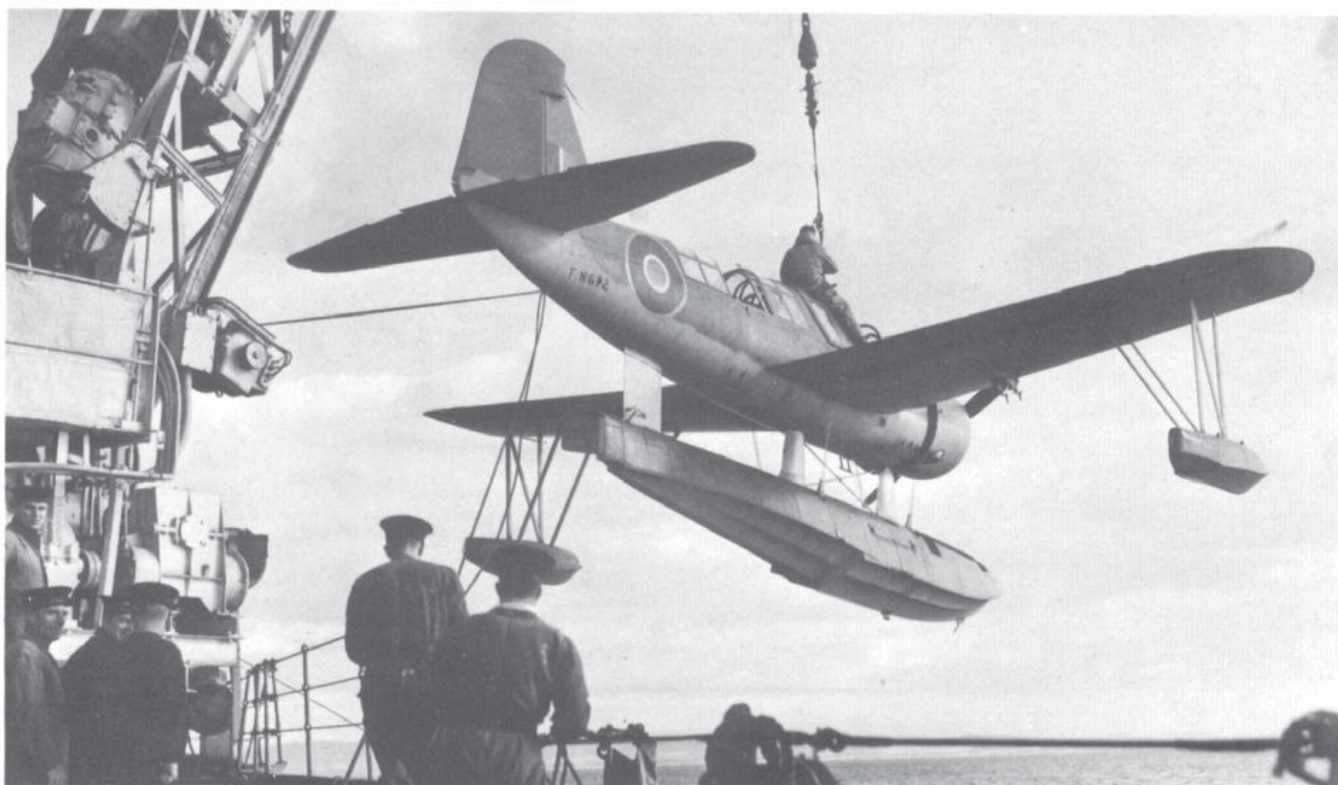
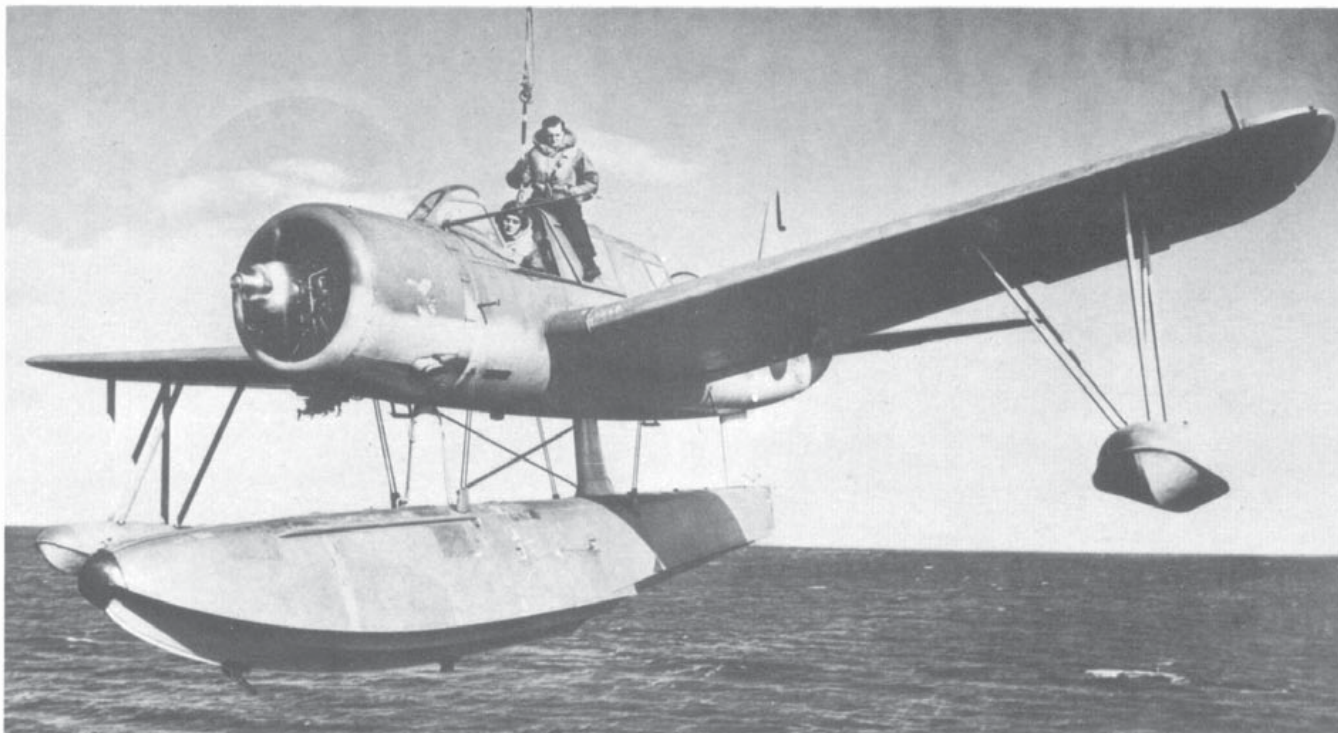
Two light cruiser Flights were formed in January 1943 for *Enterprise* and *Emerald*. Also during January two additional Armed Merchant Cruiser Flights came into being; one at Palisadoes, Jamaica, and the other at Wingfield, Capetown. These Flights were equipped with one Kingfisher each.

703 Squadron's *Fidelity* Flight met with misfortune during operations on December 28, 1942. *Fidelity*'s Kingfisher was attempting a water take-off (*Fidelity* had no catapult) and in doing so flipped-over in the rough sea and was lost. Both aircrew survived. The *Fidelity* was lost off the Azores just three days after this luckless incident.

During the summer and autumn of 1942, *Canton*, *Cilicia* and *Corfu* were fitted with US Navy-type catapults. *Cilicia* operated in the South Atlantic from January 1943 until January 1944. *Canton* began operations in the same area in February 1943, but only stayed until the latter part of the following March. *Corfu* took over where *Canton* left off.

Operating in all types of weather, *Corfu* Flight flew 142 sorties in 10 months with no time lost due to damage to its Kingfishers.





"Donald Duck" Royal Navy-style. HMS Pegasus (ex-Ark Royal seaplane tender of World War One) served in World War Two as an aircrew and deck-handling crews' catapult training ship. These two photographs of the same Kingfisher I (serial FN672, ex-BuNo.5833, delivered in March 1942) were issued to the Press in October 1942. Photo above shows the Disney character of Donald Duck astride a ship painted on the motor cowling. This view also shows to advantage the sling hoist and cantable radio mast for crane operation. It can be observed that fore and aft footrests were installed on both sides of the fuselage. (Photos: I.W.M., refs. A.12043X and A.12046WK)

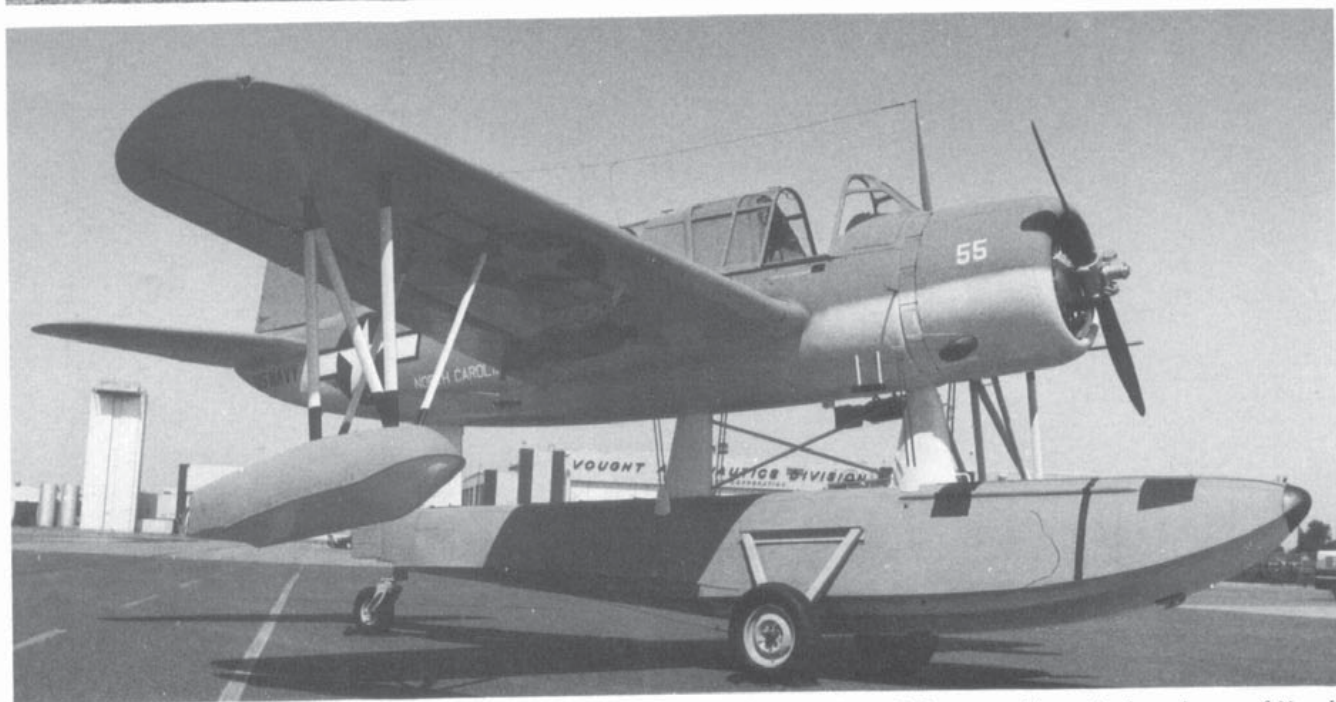
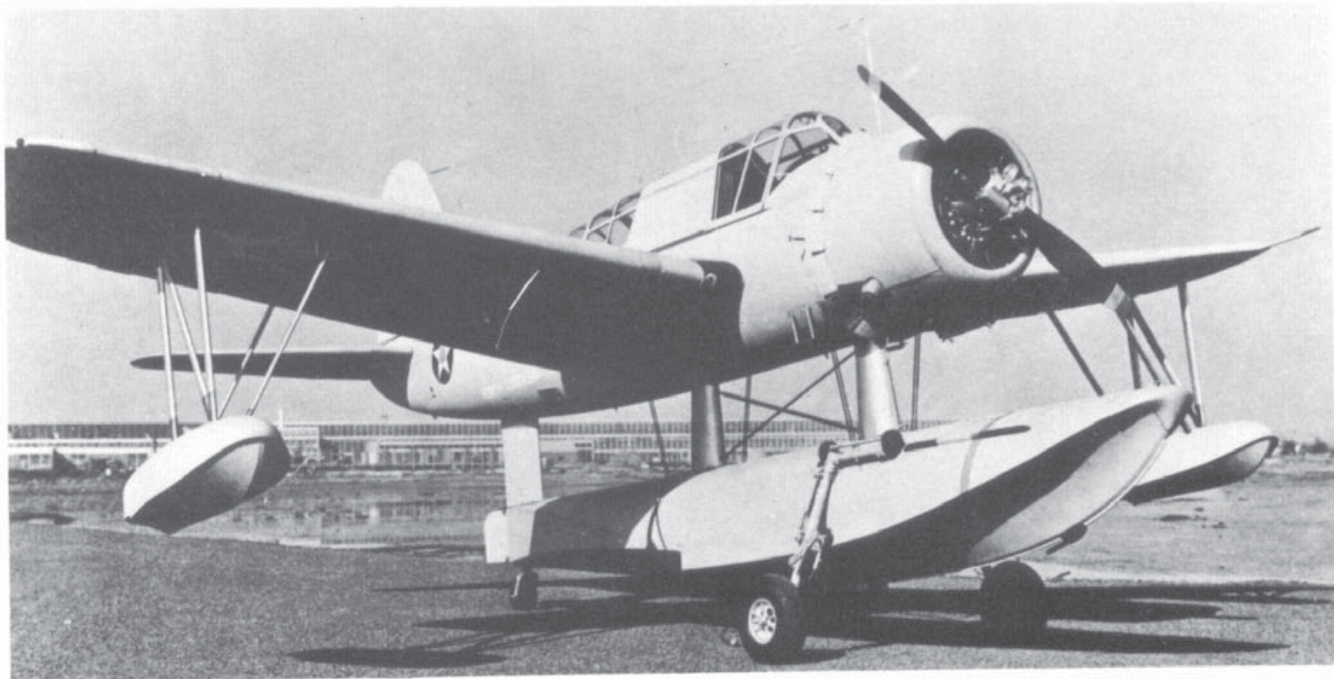
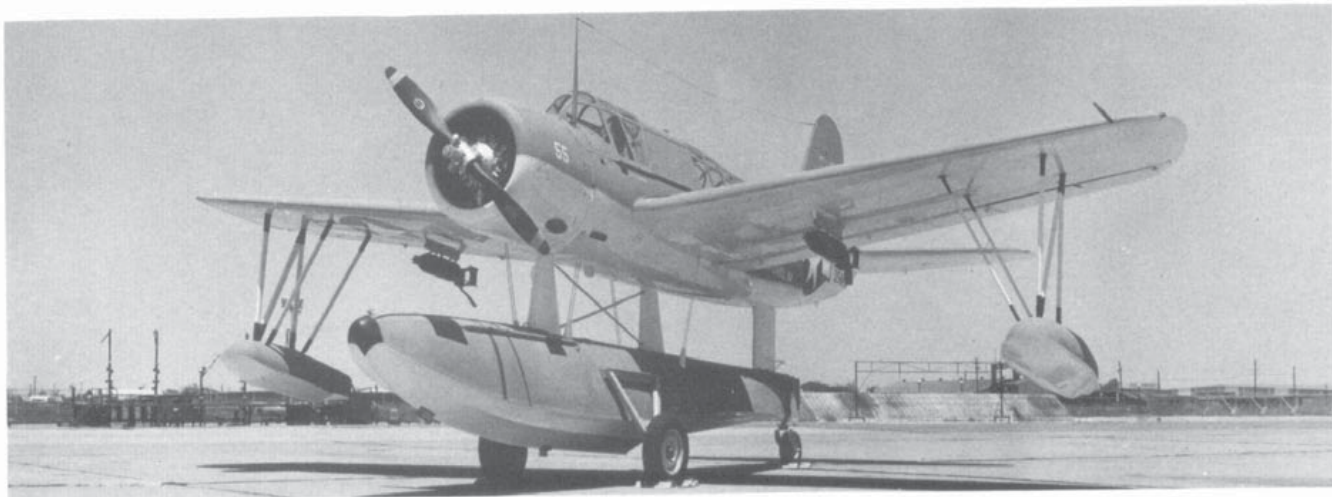
Cilicia Flight compiled a total of almost 200 sorties in 11 months. Near the end of 1943, both *Cilicia* and *Corfu* Flights received an additional Kingfisher bringing their complement to three each.

Canton operated in the Indian Ocean throughout most of 1943 escorting troop convoys between Durban, Bombay, Colombo, Aden and Mombasa. It is worthy of note that during the months of July, August and September, 1943, the Eastern Fleet air strength con-

sisted wholly of catapult-type floatplanes. During this time the Royal Navy could not spare an aircraft carrier for this area. Fifteen aircraft—three of them Kingfishers—carried the load.

Canton's Flight flew 120 sorties during the 13 months she served in the South Atlantic and Indian Oceans.

Canton Flight departed the Eastern Fleet in February 1944. *Emerald* Flight remained in the area until the end of April 1944 when it returned to Dundee



Museum theme. Top and bottom photographs show an OS2U which, in 1971, was beautifully restored by retired employees of Vought Aeronautics Division of LTV Aerospace Corporation at Dallas, Texas. The Kingfisher had crashed into a hillside on Calvert Island, British Columbia in 1944, the remains being recovered in 1963. Six years later, the USS North Carolina Battleship Commission negotiated for the wreck so that it could be rebuilt and exhibited on the fantail of the USS North Carolina (BB55) now moored in the harbour of Wilmington, N.C. The memorial OS2U-2 has been given the BuNo. serial 3073. The May 12, 1941 photograph (centre) is of a genuine OS2U-2, light-grey overall and inscribed "North Carolina" on the rear fuselage. (Photos: Vought Aeronautics)



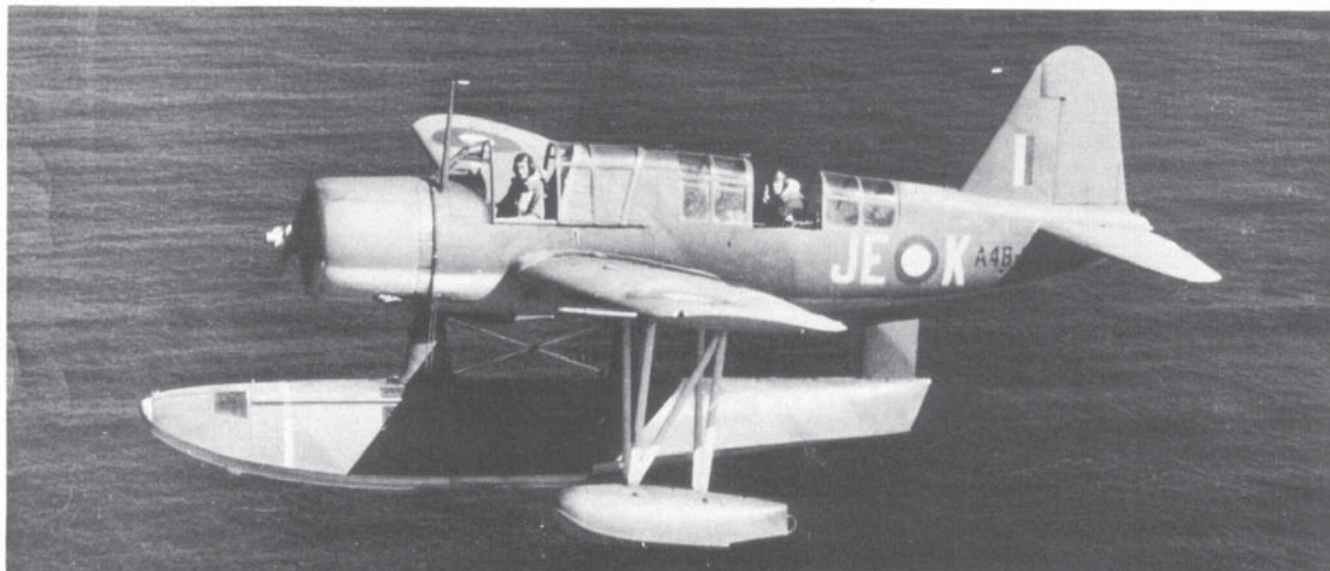
An August 1943-released photograph of a US Navy Kingfisher showing the contemporary colours and markings "through a cloud of spray at a (British) East Coast port" to quote from the official caption.
(Photo: I.W.M. PL.290E)

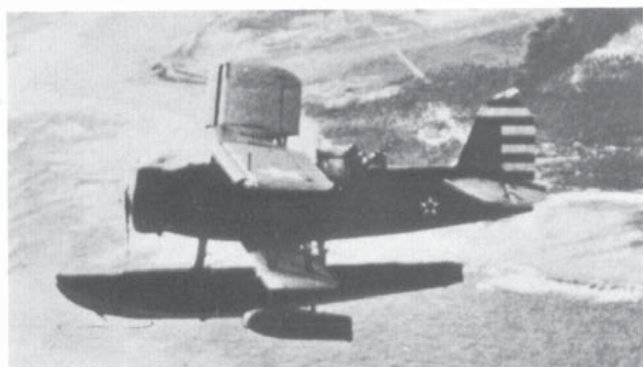
and was disbanded. By the end of April 1944, catapult aircraft had been phased-out of service in the Royal Navy—and 703 Squadron was decommissioned in the same month. Forty of the 100 Kingfishers allocated to Britain were used by 703 Squadron. The remaining Kingfishers were used by 749 Squadron at Piarco, Trinidad, for observer training duties from late 1942 to the spring of 1945. In South Africa, a Fleet Requirements Squadron—726—used two Kingfishers for target-towing, communications, radar calibration and various other tasks from September 1943 to early 1945.

Twenty Kingfishers were returned to the USA shortly before the end of World War Two in Europe thus ending OS2U service in the Royal Navy. The Kingfisher won a certain measure of acceptance in British service especially when compared with the Seafox. Overall, the Royal Navy favourite was the Supermarine Walrus which, with the Kingfisher, shared the unique experience of being the only shipborne air cover in the Indian Ocean in mid-1943. Both rightly deserve their honoured niche in naval aviation history.

Originally destined for the Naval Air Service of the Netherlands East Indies, the events of the Pacific War resulted in the diversion of at least 18 of the 24 ordered to Australia. These were allocated to the Royal Australian Air Force and given the serial numbers A48-1 to A48-18. Seven were delivered in April and eleven more in June 1942. This OS2U-3 arrived at No. 1 Aircraft Depot on May 6, 1942 and was subsequently assigned to No. 107 Squadron (code JE) at Rathmines, Sydney, N.S.W.

(Photo: via Vought Aeronautics/Art Schoeni)



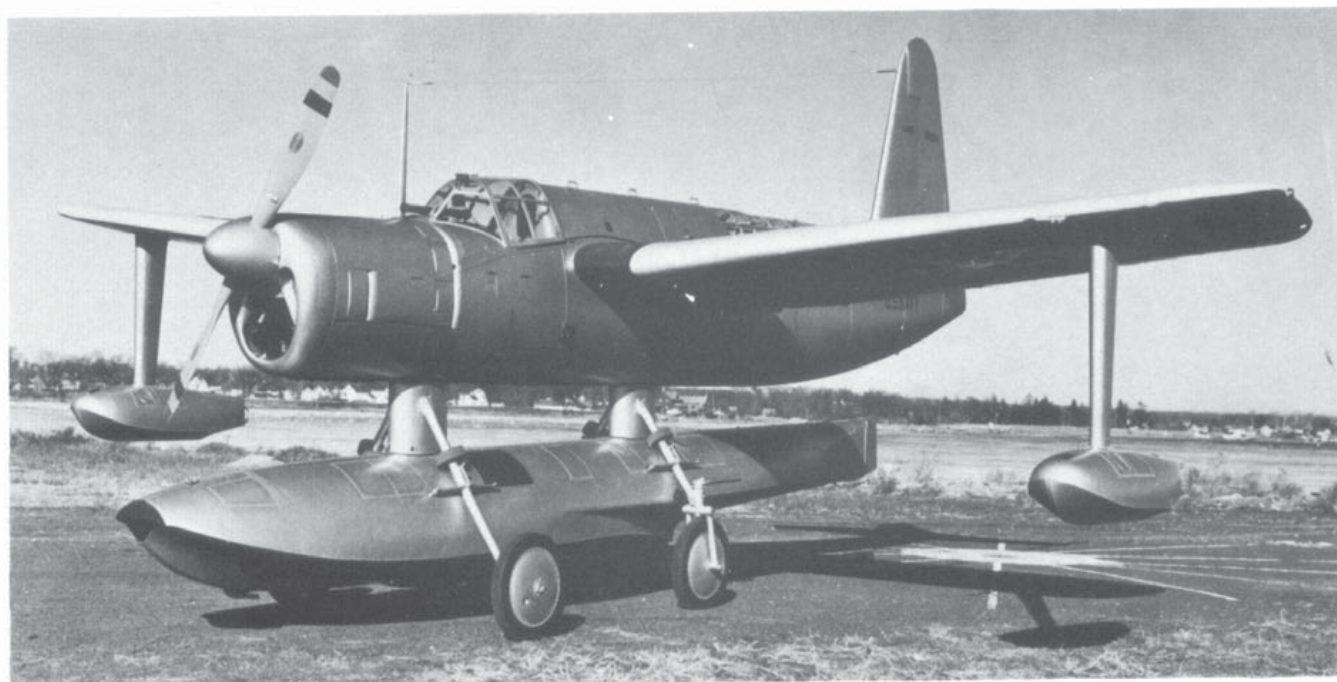


KINGFISHER CONTEMPORARIES

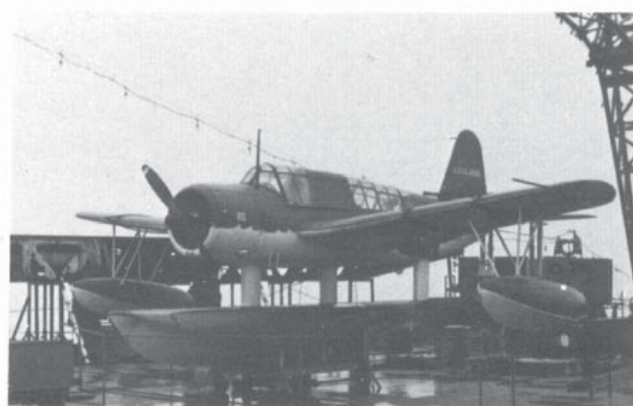
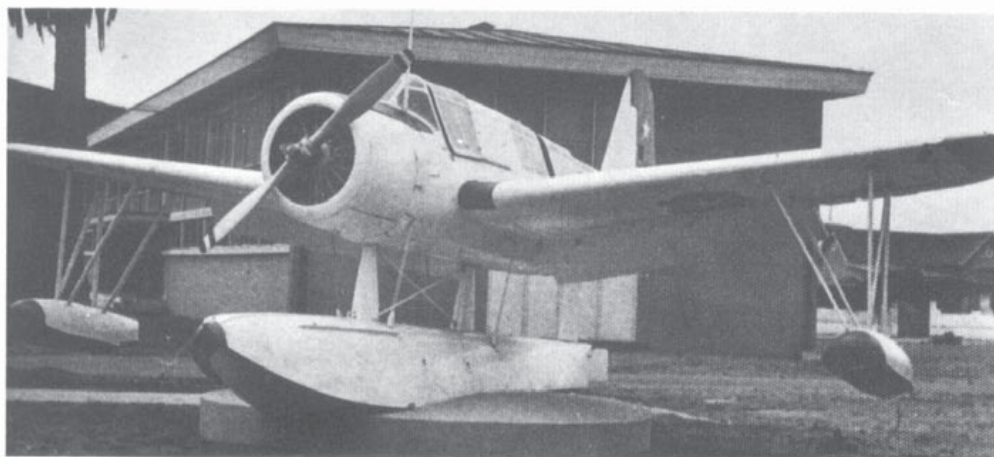
Mention in this Profile is made of the British Fairey Seafox (above) and the Kingfisher's predecessor, the Curtiss SOC Seagull (left). Unlike the redoubtable but older Fairey Swordfish torpedo biplane, the Seafox suffered a disappointing career. On the other hand, the SOC Seagull was a worthy OS2U predecessor.

The Seagull depicted scouts for the Fleet during the attack on the atoll of Wotje, Marshall and Gilbert Islands, February 1, 1942.
(Photos: Air-Britain archives and Curtiss-Wright Corp.)

But not a Kingfisher. (Right and below) Superficially resembling the OS2U-1 was the confusingly designated XSO2U-1 (BuNo.1440) which was photographed as a landplane on July 26, 1939 and as a floatplane on December 28, 1939. Only one prototype and not proceeded with, the XSO2U-1 had the novelty of an air-cooled inverted-vee inline Ranger XV-770-4 offering 450 h.p. at 3,000 r.p.m. The NACA-designed low-beam-to-length float was evolved to lessen water and aerodynamic drag but turned in a disappointing performance in docking and recovery manoeuvres. Span, 38 ft. 2 in.; length, 24 ft. 2 in. (land), 36 ft. 1 in. (sea). Note cowlings differ. (Photos: Vought Aeronautics-Art Schoeni)



Museum pieces. (Right) At Quintero Air Base, north of Valparaiso, a currently preserved Chilean Air Force OS2U-3 (CAF serial 314). In addition to the OS2U aboard USS North Carolina, two other memorial battle-ships have OS2Us, the USS Massachusetts (BB59) and (below) the USS Alabama (BB60) at Mobile, Ala. The last-mentioned has the curious serial, namely of the XOS2U-1 (BuNo.0951) whereas it was originally a landplane OS2U-3 located in Mexico. (Photos: CAF 314 via Juan-Carlos Gumicio and "0951" from colour prints by Norman B. Wiltshire)



COMPARATIVE DATA: ALL KINGFISHER MODELS

Model	Powerplant (Pratt & Whitney "Wasp Junior")	Max. Output (h.p.)	Gross Weight (lb.)	Max. Speed (m.p.h.)	Service Ceiling (ft.)
XOS2U-1	R-985-4	450	4,611	177	20,300
OS2U-1	R-985-48	450	4,542	184	19,500
OS2U-2	R-985-50	450	4,542	182	20,000
OS2U-3	R-985-AN-2	450	4,560	183	20,100
OS2N-1	R-985-AN-2/8				

Dimensions: For all models—Span, 36 ft. 0 in.; length, 30 ft. 1 in.; height, 12 ft. 11 in.

OS2U KINGFISHER BUREAU NUMBER ASSIGNMENTS

Model	Bureau Number	Quantity	Comments
XOS2U-1	0951	1	Prototype
OS2U-1	1681-1734	54	Entire production of OS2U-1
OS2U-2	2189-2288	100	First production of OS2U-2
OS2U-2	3073-3130	58	Second production of OS2U-2
OS2U-3	5284-5941	658	First production of OS2U-3
OS2U-3	5942-5972	31	Assembled by the Naval Aircraft Factory
OS2U-3	5973-5989	17	
OS2U-3	5990-6289	(300)	Cancelled
OS2N-1	01216-01515	300	Same as OS2U-3 but built by Naval Aircraft Factory
OS2U-3	09393-09692	300	

Total number of Kingfishers built: 1,519

KINGFISHERS DELIVERED TO COUNTRIES NOT UNDER THE LEND LEASE AGREEMENT

Model	Bureau Number	Quantity	Comments
OS2U-3	Unknown	3	To Dominican Republic
OS2U-3	Unknown	6	To Mexico

OS2U KINGFISHERS DELIVERED TO OTHER COUNTRIES

Model	Bureau Number	Quantity	Comments
OS2U-3	5811-5840	30	And later 09513-09582 total 100 to British Royal Navy; serials FN650-749, (Lend Lease)
OS2U-3	5911-5925	15	To Chile, (LL)
OS2U-3	5926-5931	6	To Uruguay, (LL)
OS2U-3	5932-5940	9	To Argentina, (LL)
OS2U-3	5966-5989	24	To Netherlands East Indies. After fall of NEI, these OS2Us were sent to Australia. Only 18* of the 24 are accounted for; the fate of six is not known
OS2U-3	09513-09582	70	To Britain, (LL). Twenty later returned to US Navy

Total number of OS2U-3s delivered under Lend Lease: 154

*RAAF serial nos. A48-1 to 18, received April-June 1943.

ACKNOWLEDGEMENTS

The authors take this opportunity of expressing their deep appreciation of the invaluable assistance given to them by the US Navy, government agencies and private individuals. As usual, American Aviation Historical Society members have given generously including William A. Riley, William T. Larkins, Harry S. Gann, Lloyd S. Jones, John W. Caler; and Bunny d'E. C. Darby of the A.H.S. of New Zealand. For the above lists and many photos, special thanks to Art Schoeni of Vought Aeronautics.

Series Editor: CHARLES W. CAIN

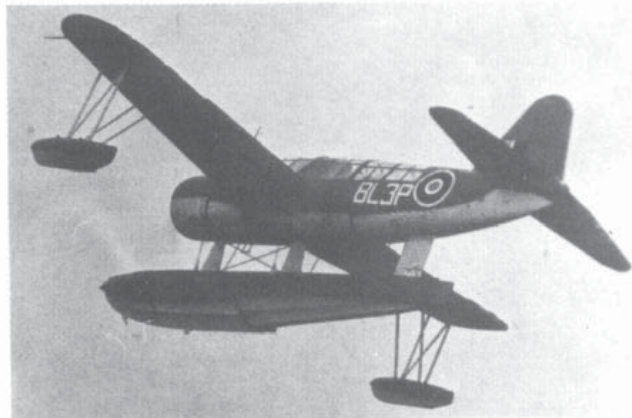


Rex B. Beisel



On February 2, 1972, the man who designed the OS2U Kingfishers—and the Navy's F4U Corsair fighter which first flew on May 29, 1940—died aged 78 at Sarasota, Florida. Born in San Jose, California on October 23, 1893, Rex Buran Beisel began a life-long association with naval aviation by serving from 1917 to 1923 as an engineer and draughtsman with the Navy Dept., Washington D.C. When he retired in 1949 he had been general manager of Vought-Sikorsky for seven years.

(Photo: Vought Aeronautics)

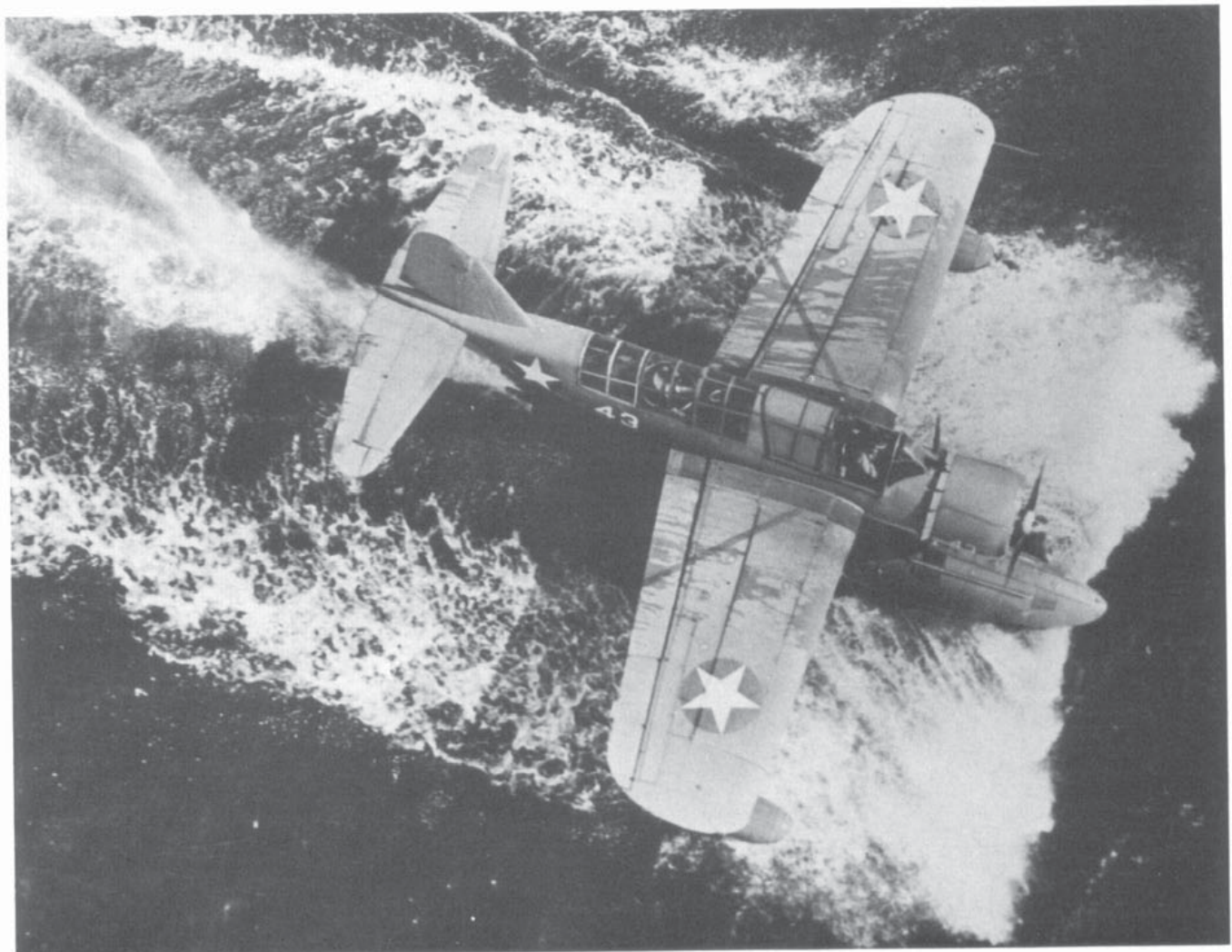


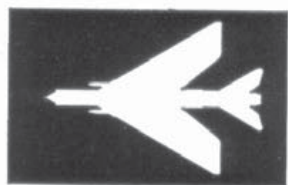
(Top left) OS2U-3s awaiting delivery at the plant on November 6, 1941. The light-grey overall finish blends well with the misty winter's sunlight. (Photo: Vought Aeronautics-Art Schoeni)

(Left) Floatplane training for Royal Navy Kingfisher observers took place at Royal Naval Air Station Piarco, Trinidad, of which this OS2U-3 coded BL3P is an example. (Photo: via the authors)

(Below) Another view of "43" illustrated on an earlier page of this Profile. The wings and tail surfaces show evidence of the spray created by sea alighting and 10-kt. taxiing.

(Photo: I.W.M., ref. EN.22052)





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