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NAVAL AIRCRAFT

By Hal Andrews

OY Sentinel

hese days we're getting used to changing company names for production aircraft. It used to be rare, but one that did suffer this problem in early WW II days and throughout its Marine Corps combat life, including Korean War service, was the Stinson/Vultee/Convair Sentinel. Its assigned name was seldom used, particularly by the Marines. They preferred the general term "grasshoppers" used for several civilian light plane designs adapted for WW II Army liaison and artillery spotter duties.

Originally designated in the Army's long standing O for Observation series, all of these were redesignated in 1942 in a new L for Liaison series. What became the Marines' OY was initially the Stinson O-62, although Stinson was already part of Vultee. Becoming the L-5, it

was based on a popular three- or four-place Stinson model larger than the other four 65hp engine two-place designs whose military versions shared the official Grasshopper name in the Army Air Force's L series. Unlike these, the L-5 had a completely new-design tandem two-place fuselage and considerably improved performance and payload capacity with its 185-hp

load capacity with its 185-hp Lycoming six-cylinder horizontally opposed engine. A simple steel tube fuselage and wooden wing and tail surfaces, fabric covered, combined with high-lift flaps and slats, allowed it to operate in the field as well as the other Army L models, and L-5s were procured in large numbers.

The Grasshopper's success "living" with Army ground troops came to the attention of combat Marines in the Pacific and headquarters personnel in Washington. When the 1st Marine Division launched the assault on Cape Gloucester, New Britain, in late 1943,



Above, an OY-1 takes off from Sargent Bay (CVE 83) at Iwo Jima during WW II. Left, this OY-2 is typical of the aircraft which scoured the rugged terrain of North Korea to provide eyes for the ground troops in 1951. The downward-opening rear door was for photography or loading a stretcher.

its commanding general obtained 10 used Grasshoppers from the Army and organized their effective use with an unofficial group made up from Marine ground personnel. By this time, Marine Headquarters and Bureau of Aeronautics (BUAER) personnel had arranged to obtain 72 L-5s for the Marines, designated OY-1s. Earlier in the year, Vultee and Consolidated had merged to form Consolidated Vultee, and all subsequent new-design Navy aircraft acquisitions from Convair (as it came to be called) would continue the long series of Consolidated designations using Y.

As OYs were delivered beginning in October, Marine Observation Squadrons (VMO) were being commissioned as part of an Artillery Spotting Division. In early 1944 four commissioned squadrons were reorganized into VMOs 1 through 4, each to serve with a Marine combat division using eight aircraft. An Artillery Spotting Replacement

Training Center at Quantico, Va., trained aircrew and ground personnel for additional VMO squadrons and combat replacements. Four more were commissioned in 1944, all deployed by spring 1945.

VMOs 2 and 4 were first to participate in a major island invasion, on Saipan in VMOs 4 and 5 experimented with launches from tank landing ships (LST) using Brodie gear. An overhead cable ran between fore and aft arms off one side. Suspended by a cradle running along the cable, an OY at full throttle would accelerate to flying speed before release and fly away. VMO losses when a kamikaze sank



Courtesy U.S. Coast Guard

Top, a Coast Guard OY-1. Above, this Marine Corps OY-1 observation plane narrowly missed three Japanese mortars as it became the first to land at Motoyama Airfield No. 1 on Iwo Jima. A Third Division Marine riding the strut guides pilot Lt. Harvey Olson to a parking space out of range of guns on the nearby mountain.

June 1944. Flown ashore from escort carriers (CVE) on D-day plus 2, the units were in the thick of the battle, sustaining many casualties; the use of OYs for casualty evacuation was highlighted. Army experience had previously recognized this use; subsequent models had a boxy rear fuselage and revised rear cabin door, accommodating a stretcher patient aft of the cabin. Regardless of Army model, all Marine aircraft were OY-1s.

Through the remainder of the Pacific island campaigns, VMO OYs were at the heart of the battles. In preparation for the Iwo Jima invasion,

Bismarck Sea (CVE 95) might have given reason for using LSTs to launch OYs during subsequent invasions, but the loss of OY aircraft due to ship rolling and other difficulties terminated Brodie system use. As at Saipan, losses in low-altitude spotting missions and on the ground from Japanese mortar and artillery rounds were heavy—all but one of one squadron's aircraft were surveyed after the battle.

V-J Day saw the OYs continue to operate with Marine ground troops as they took up their occupation duties in Japan and postwar activities in Guam and China. At the beginning of 1946 nearly 200 of the 306 procured remained, many nonoperational. Subsequently, numbers decreased and various Navy and Marine units used OYs for utility purposes. After the Coast Guard was returned to the Treasury Department, it obtained five Army L-5s as OY-1s to search for stills

and perform other non-maritime duties for several years. In December 1948, though only a few early OY-1s were in service, BUAER took action to recognize that various OYs had different electrical systems, 12-volt in early ones and 24-volt in the rest. To avoid ground support problems, the 24V aircraft were redesignated OY-2s. With the

rest of the 12V ones soon gone, all in service were officially -2s by June 1950 when the Marines took some of the less than 50 remaining OYs back to war in Korea. Anachronisms, with jets and helicopters getting the major attention, they resumed the same duties performed in WW II. VMOs 5 and 6 operated the OYs, with one new twist: each squadron was equipped with half OYs and half helicopters—initially Sikorsky HO3S-1s. By late 1951, the aging OYs were being replaced by modern all-metal liaison planes-

Army Cessna L-19s as OE-1s. Phased out of VMO squadrons by late 1954, the remaining OYs were subsequently retired.

OY

Wing span: 34'
Length: 24'1"
Height: 7'11"
Max. takeoff weight: 2,265 lbs
Engine: One Lycoming
O-435-1, 185 hp

Max speed: 110 kts
Service ceiling: 15,600'
Range: 325 nm
Crew: Two
Armament: None