Yokosuka E14Y



"GLEN"

1:72

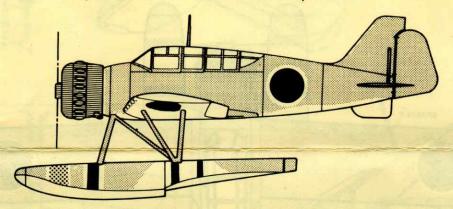
THE EAGLES TALON, INC

HISTORY

Yokosuka E14Y

Code Name: GLEN

One of the most stringent requirements ever put to aircraft designers prior to World War II was that of the submarine borne aircraft. Tried to varying degrees of success by almost every major country utilizing submarines, only one country carried the edea to a successful conclusion that resulted in operational use. That was the Japanese.



The requirements demand a small aircraft that can be assembled/disassembled in a minimum amount of time, that can be stored in a small watertight hanger (usually drum like in shape), handle landings in the open sea for retrieval, be able to take the stress of catapult takeoffs, and still have enough speed, weapons load and handling agility to qualify as a combat aircraft.

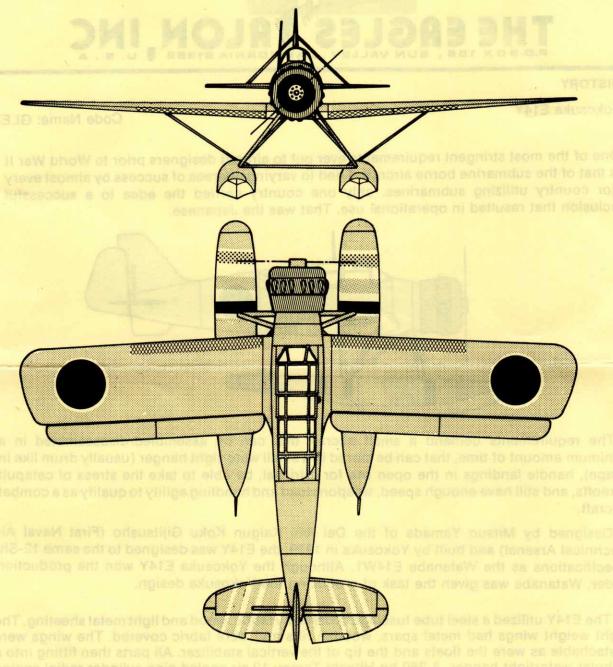
Designed by Mitsuo Yamada of the Dai Ichi Kaigun Koku Gijitsusho (First Naval Air Technical Arsenal) and built by Yokosuka in 1939, the E14Y was designed to the same 12-Shi specifications as the Watanabe E14W1. Although the Yokosuka E14Y won the production order, Watanabe was given the task of producing the Yokosuka design.

The E14Y utilized a steel tube fuselage covered by fabric, wood and light metal sheeting. The light weight wings had metal spars, wooden ribs and were fabric covered. The wings were detachable as were the floats and the tip of the vertical stabilizer. All parts then fitting into a tubular watertight hanger. A 350 hp Hitachi Tempu 12 air cooled nine cylinder radial engine was used, wrapped by a tight cowling.

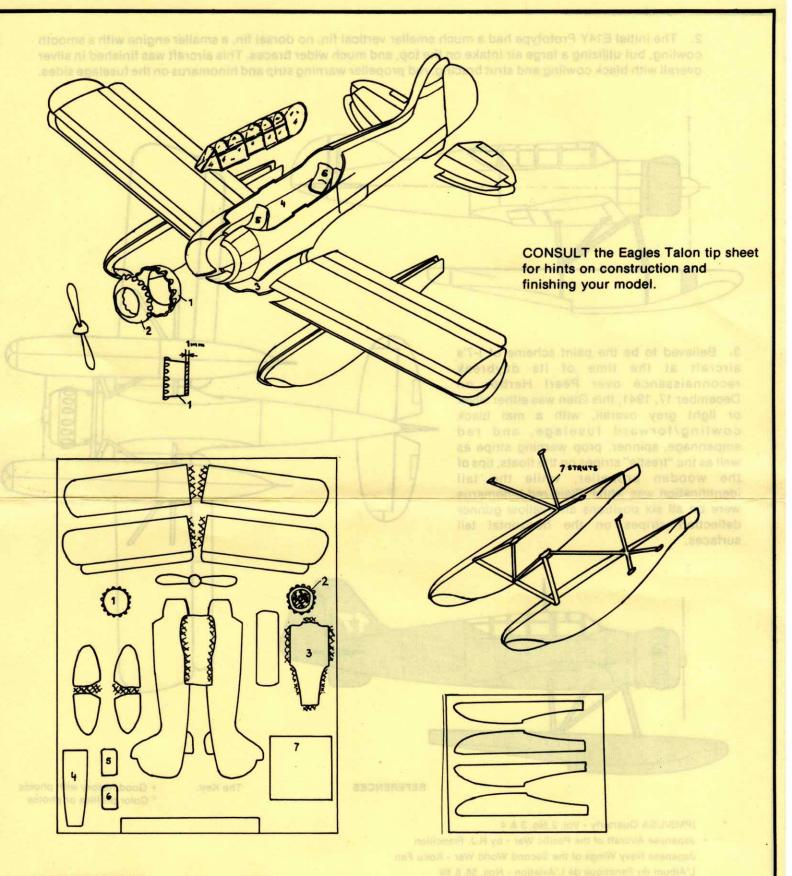
First flown in 1939, the prototype was followed by 125 production aircraft, built through 1943. Designated Navy Type O Submarine-borne Reconnaissance Seaplane Model 1-1 (later: Navy Type O Small Reconnaissance Seaplane Model 11) the E14Y was code named by the allies as GLEN.

GLEN first was used operationally for post strike evaluation of Pearl Harbor on December 17, 1941. Based aboard submarines I-7 thru I-11, and I-15 thru I-35, the GLEN was used for antishipping flights as well as reconnaissance flights over Allied installations in Australia, New Zealand, Africa, Madagascar, the Aleutions, and the U.S. mainland. The wide spread use of radar and the GLEN's comparatively slow cruising speed of 90 kts forced the removal of the type from front line use. It was used extensively though, as a home front patrol bomber.

The Glen is best known for its attacks against the U.S. mainland on September 9 and 29, 1942. Launched from the submarine I-25, and piloted by Warrant Officer Fujita, the two attacks each consisted of the dropping of two 170 lb (76 kg) incendiary bombs into the Oregon forests. The intent of these attacks, the only ones ever against the U.S. mainland by aircraft, were to start raging forest fires, but the results were insignificant. (For a thoroughly fascinating and thorough narration of all activities against the U.S. mainland by the Japanese, read "Retaliation", as listed in the references.



1. E14Y Glen of the 6th Fleet (submarine fleet) based at Kure and used for off-shore patrol duties of the home islands, primarily the Seto Inland Sea area. Basic color was dark green upper surfaces with pale grey lower surfaces. It had red hinomarus with wide white surrounds on fuselage and on the wings top, while the bottom of the wing had plain red insignias. It carried a large white fuselage ID number, while the four digit number on the tail was red with white borders. Yellow leading edge bands contrasted sharply with the matt black cowling. The floats were somewhat more colorful, again being dark green on the front and rear upper surfaces, while light grey in the middle and underneath. The propeller warning stripes (front set) are white-red-white, while the gunners alignment markings on the horizontal stablilizer are just white. The stripes by the front braces are "trestle markings" used for proper alignment during assembly and launch from the submarine, and are white-black-white. Two single black stripes are back by the rear bracing. Other aircraft based at Kure and utilizing identical paint schemes were, 67-05, and 67-15.

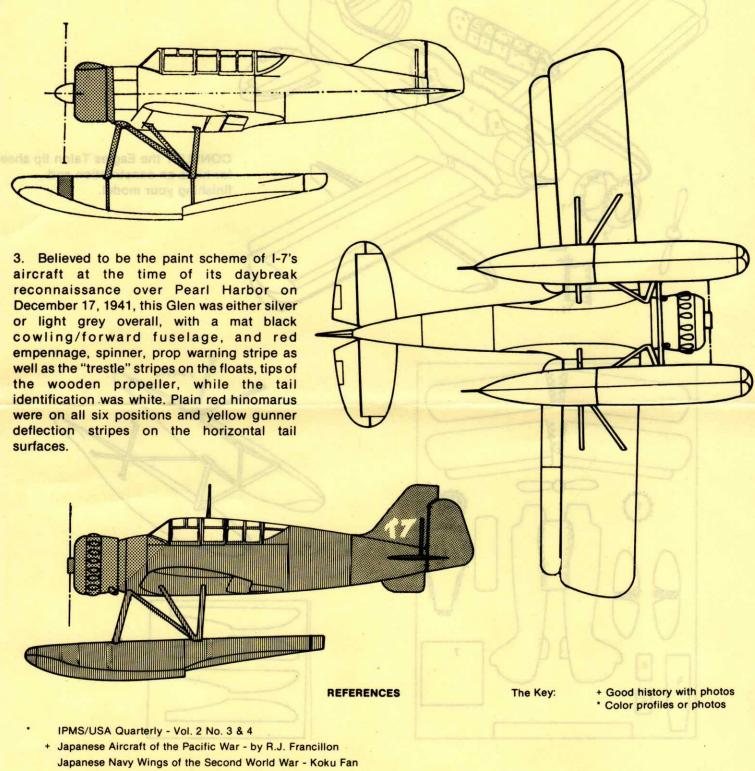


SPECIFICATIONS

Wing span: 36'1'' (11m); Length: $28'^{1}/_{4}''$ (8.54m); Weight-empty: 2,469 lbs. (1,119 kg.); Weight-maximum: 3,527 lbs. (1600 kg.); Speed-cruise; 104 mph (90 kts.) at 3280 ft. (1,000 m); Speed-maximum: 153 mph (133 kts.) at sea level; Ceiling 17.780 ft. (5,420 m); Range 476 nm (548 s.m.).

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2. The initial E14Y Prototype had a much smaller vertical fin, no dorsal fin, a smaller engine with a smooth cowling, but utilizing a large air intake on the top, and much wider braces. This aircraft was finished in silver overall with black cowling and strut bracing, red propeller warning strip and hinomarus on the fuselage sides.



L'Album du Fanatique de L'Aviation - Nos. 58 & 59

Pictorial Directory of Japanese Recon Planes - by Maru authors, published by Kojin-sha

+ RETALIATION: Japanese Attacks and Allied Countermeasures on the Pacific Coast in World War II - Bert Webber, Oregon State Univ. Press Submarine Aircraft, by D.R. Winams - A.A.H.S. Journal, Vol. 12 No. 1, Spring 1967 Time Magazine, May 25, 1962

Warplanes of the Second World War: Vol. 6 - Floatplanes, by William Green

West Michigan IPMS NEWS, Vol. 3 No. 11, November 1975 - Japanese Subs, by Jack Potter