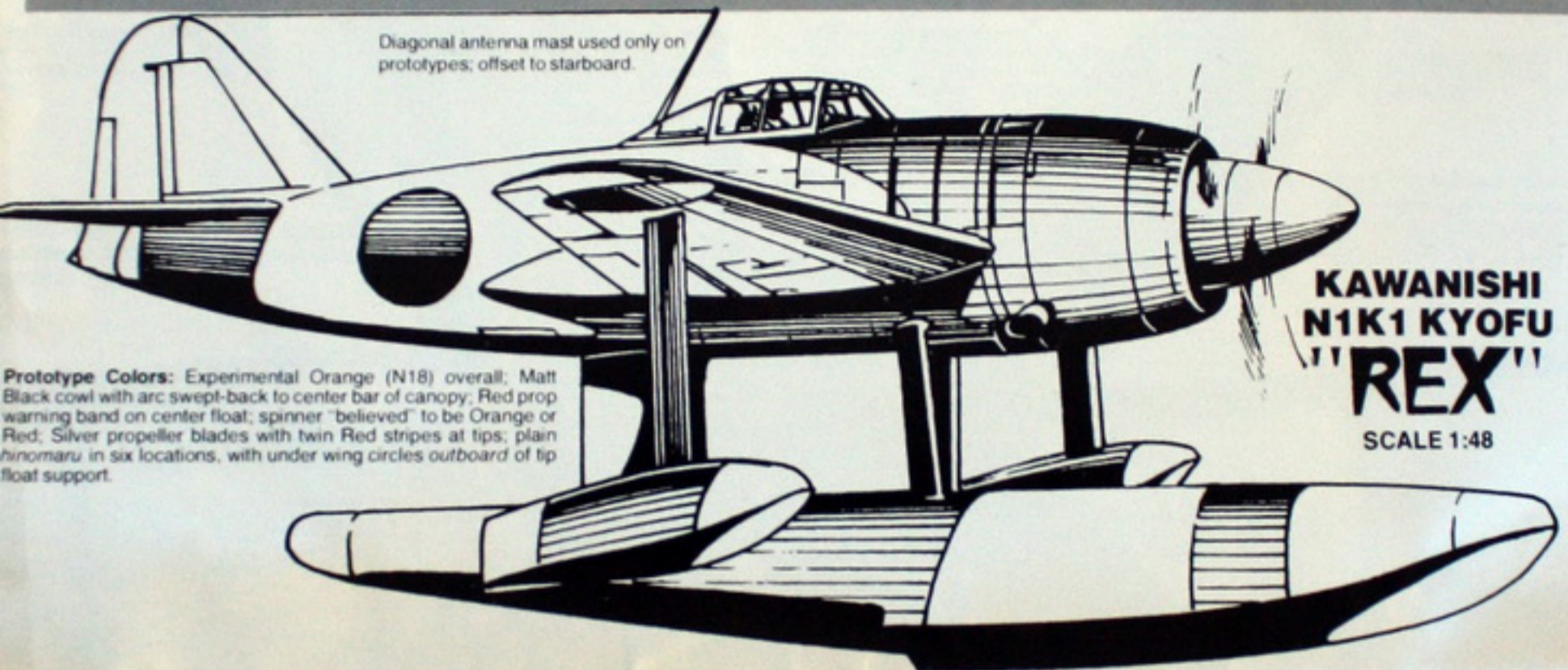




Exquisite
vac-forms for
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Wings 72 & Wings 48, Inc.
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Diagonal antenna mast used only on prototypes; offset to starboard.

**KAWANISHI
N1K1 KYOFU
"REX"
SCALE 1:48**

Prototype Colors: Experimental Orange (N18) overall; Matt Black cowl with arc swept-back to center bar of canopy; Red prop warning band on center float; spinner "believed" to be Orange or Red; Silver propeller blades with twin Red stripes at tips; plain hinomaru in six locations, with under wing circles outboard of tip float support.

ANOTHER HISTORICALLY INTERESTING AIRCRAFT FROM WINGS 48!

Certainly history's most elegantly styled floatplane fighter, the Kawanishi N1K1 *Kyofu* (Mighty Wind), allied code name "Rex", was also a potent combatant with the extra, unique distinction of having its basic, regal design adapted to a land version – the N1K1-J *Shiden*, allied code name "George".

In early 1940, the military doctrine of the Imperial Japanese Naval Command – aware that war with the United States was inevitable – envisioned need for a water-based fighter whose main mission was to insure air supremacy at the time of offensive amphibious assault landings, and to immediately operate from newly conquered, improvised bases during the foreseen "island-hopping" campaigns in the remote, southwest Pacific where land-based fighters or opposing carrier forces would likely not be operative. The most obvious solution at the time – although recognized strictly as an interim, stop-gap measure – was to convert the highly successful Mitsubishi A6M2 *Zero-Sen* into a floatplane: accomplished by Nakajima when their A6M2-N floatplane conversion, allied code name "Rufe", made its maiden flight on December 8, 1941.

In September 1940, seeking to obtain the world's most powerful and advanced floatplane for the assigned task, the Naval staff turned to Kawanishi – then a skillful producer of some of the world's most outstanding flying boats. Eighteen months later, on May 6, 1942, their first *Kyofu* prototype was flown and demonstrated excellent handling characteristics and "considerable potential" although "considerable skill" was required during take-off and landing, a trait throughout its career. "Rex" featured an exceptionally clean and stately design characterized by a laminar-flow aerofoil wing, mid-mounted to avoid splashing water on take-off and landing; a large center main-float, attached by a V-strut forward, 1-strut aft; and petite tip-floats, each supported by a single, slim, cantilever strut. Devoid of extraneous struts or bracing wires and with a long, sharply pointed spinner, "Rex" was decidedly rakish. And potent! It carried two 7.7mm cowl-mounted machine guns, two 20mm wing cannons and could carry two 66 lb (30-kg) bombs on underwing racks. Also, it proved to be 30 mph faster than the interim "Rufe".

The prototype was powered by a Kasei 14-cylinder radial air-cooled engine, geared for contra-rotating, 2-blade props which were deemed necessary to offset airscrew torque developed by the powerful engine mounted in the rather short fuselage. (The contra-props proved to be more trouble than they were worth and, from the second prototype onward, all "Rex's" used the similar 1,460 hp Kasei 13 engine with an extension shaft driving a normal constant-speed, three-bladed airscrew).

By late 1942, four other "Rex" prototypes had been subjected to testing and revision and the plane was ordered into production in December 1942. By March 1944, the last of 97 "Rex" fighters was delivered – curtailed in favor of "George" because the war requirements had changed – drastically!!! The Japanese Navy was no longer on the offensive, rather, it desperately needed land-based defensive fighters – and lots of them!! – instead of a few single purpose floatplanes designed for offensive support roles. Further, the originally encountered paltry handful of mediocre Allied fighters had been replaced by a multitude of screamin' demons in the form of F4U "Corsairs", F6F "Hellcats" and P-51D "Mustangs". Lastly, although "Rex" was a rugged and highly efficient aircraft with commendable maneuverability, it was no match for swarms of adversaries...especially while dragging a center-float through the air! Thus, in early 1944, Kawanishi turned its full attention to production of the derived land-based "George".

Understandably, with only 97 produced, "Rex's" combat was limited. However, it was used against Australian, British and U.S. air forces as interceptors guarding the Balikpapan oil fields in Borneo and the Dutch East Indies; later "Rex" provided homeland patrol and defense with the Otsu Kokutai (Naval Air Group) operating from Lake Biwa near Kyoto on the main island of Honshu, as well as with the Sasebo, Kure, Sukumo, 453rd 801st, 901st and 951st N.A.G.; finally in late June 1945, a night attack unit was formed with *Kyofu's* of the 2nd Kowa Fighter Group. Surprisingly, of the 97 "Rex's" produced, three survived the war; one is stored at Silver Springs, Maryland for eventual restoration (and display in the National Air and Space Museum, Washington, D.C.); one, spuriously marked, is on outdoor display at NAS Willow Grove, Pennsylvania; and one handsome, newly restored example is at the Chester Nimitz Museum in Fredericksburg, Texas, approximately 100 miles from San Antonio.

SPECIFICATIONS: Wing Span 39' 4 1/2" (12.0 m); Length 34' 8 1/4" (10.58 m); Height 15' 8" (4.75 m); Weight loaded 7,716 lb (3500 kg); Maximum speed 304 mph @ 18,700' (264 km/h @ 5,700 m); Service ceiling 34,645' (10,560 m); Normal range 656 statute miles, 570 nautical miles.

COLOR CROSS REFERENCE:

Upper surface green:
Lower surface grey:
Propeller blades & spinner:
IFF leading edge:
Cockpit interior green:
Meatball red & prop warning:

Munsell
10G3/2
N7.5/
5YR3/4 approx
10YR7/14
10Y4/4
5R4/12 (new)

FS 595
34058
36492
300457
13432
34151
31136 (new)
10076 (weathered)

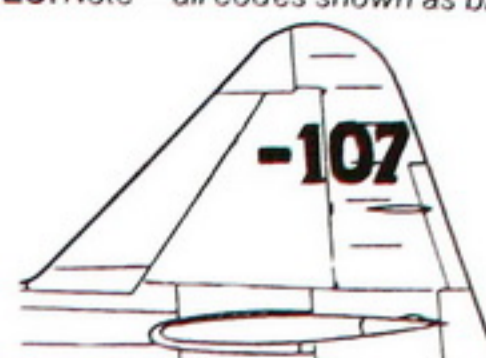
Blue/Green

Note hinomaru inboard of float support.

TAIL CODES: Note—all codes shown as black are actually white serif unless otherwise noted.



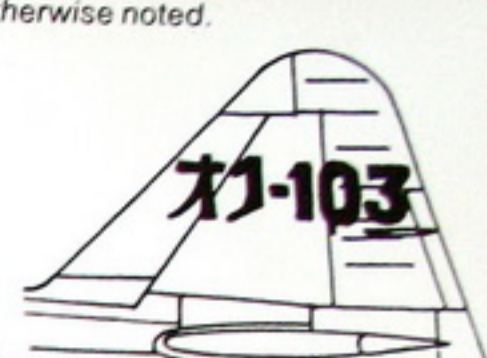
Kaigun Koku Gijyutsusho, 1943. (Navy Air Test Unit). Black (or solid Red?) code indicates 8th prototype (overall Orange).



Admiral Nimitz State Historical Park, Fredericksburg, Texas. Kyofu serial No. 562, the 62nd produced. Unit code is missing.



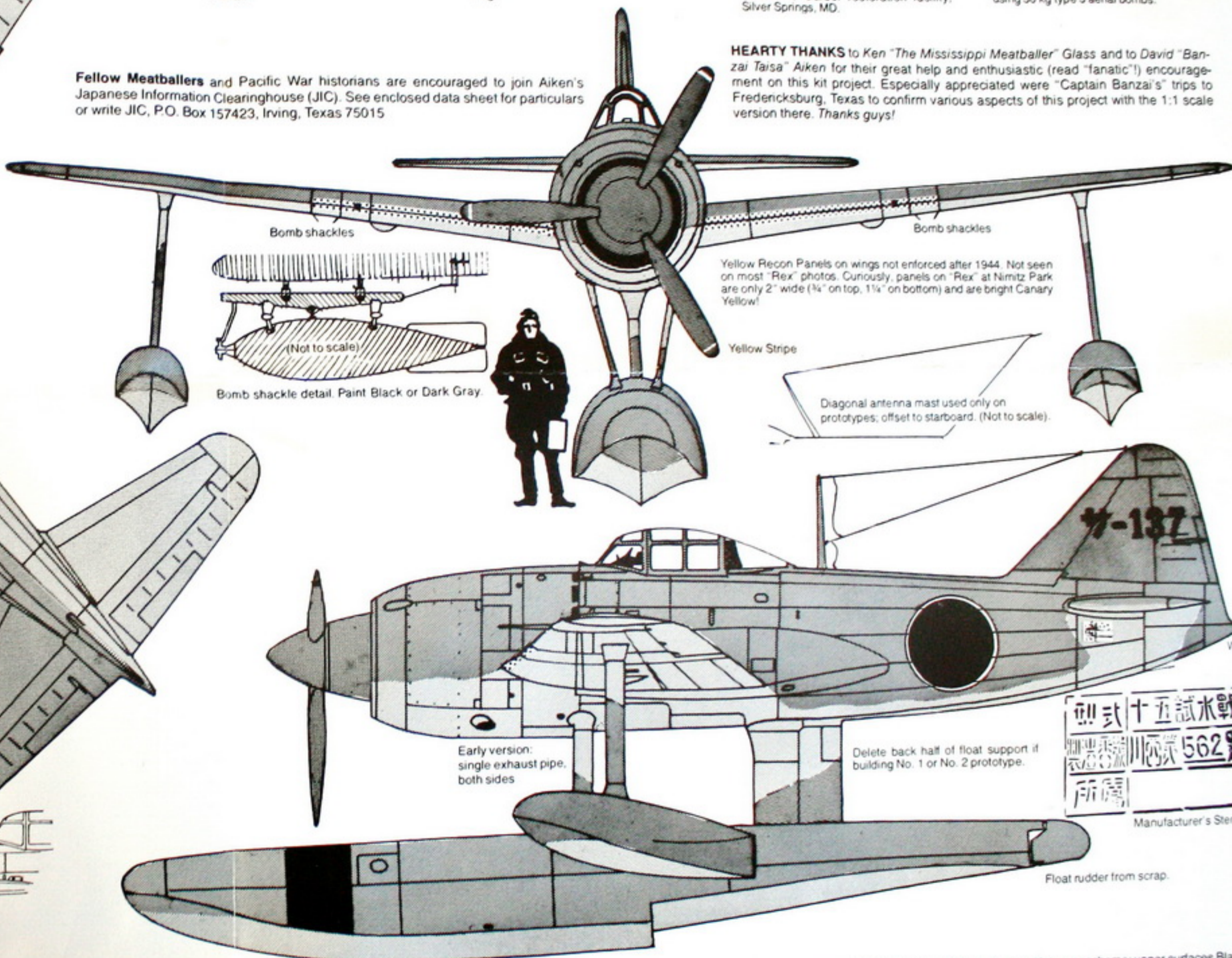
903 Kokutai, present day! Kyofu serial No. 514, the 14th produced. Presently at National Air & Space Museum's Garber restoration facility, Silver Springs, MD.



Otsu Kokutai, late 1944 Based at Lake Biwa, Japan. Lt. Yasushi Kuwashima used "Rex" to bomb B-29s using 30 kg type 3 aerial bombs.

Fellow Meatballers and Pacific War historians are encouraged to join Aiken's Japanese Information Clearinghouse (JIC). See enclosed data sheet for particulars or write JIC, P.O. Box 157423, Irving, Texas 75015

HEARTY THANKS to Ken "The Mississippi Meatballer" Glass and to David "Banzai Taisa" Aiken for their great help and enthusiastic (read "fanatic") encouragement on this kit project. Especially appreciated were "Captain Banzai's" trips to Fredericksburg, Texas to confirm various aspects of this project with the 1:1 scale version there. *Thanks guys!*



Bomb shackles

Bomb shackles

Yellow Recon Panels on wings not enforced after 1944. Not seen on most "Rex" photos. Curiously, panels on "Rex" at Nimitz Park are only 2" wide (1/4" on top, 1 1/4" on bottom) and are bright Canary Yellow!

Yellow Stripe

Diagonal antenna mast used only on prototypes; offset to starboard. (Not to scale).

Bomb shackle detail. Paint Black or Dark Gray.

(Not to scale)

Plexiglass

Open

Aft part of Canopy

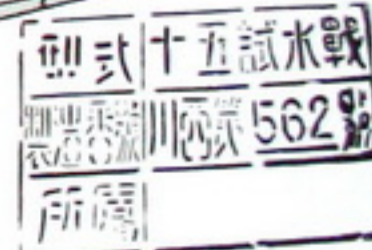
Red

Prototypes and early versions had tube exhaust out bottom

Late Kyofu had individual exhaust stacks

Early version: single exhaust pipe, both sides

Delete back half of float support if building No. 1 or No. 2 prototype.



Manufacturer's Stencil

Float rudder from scrap.

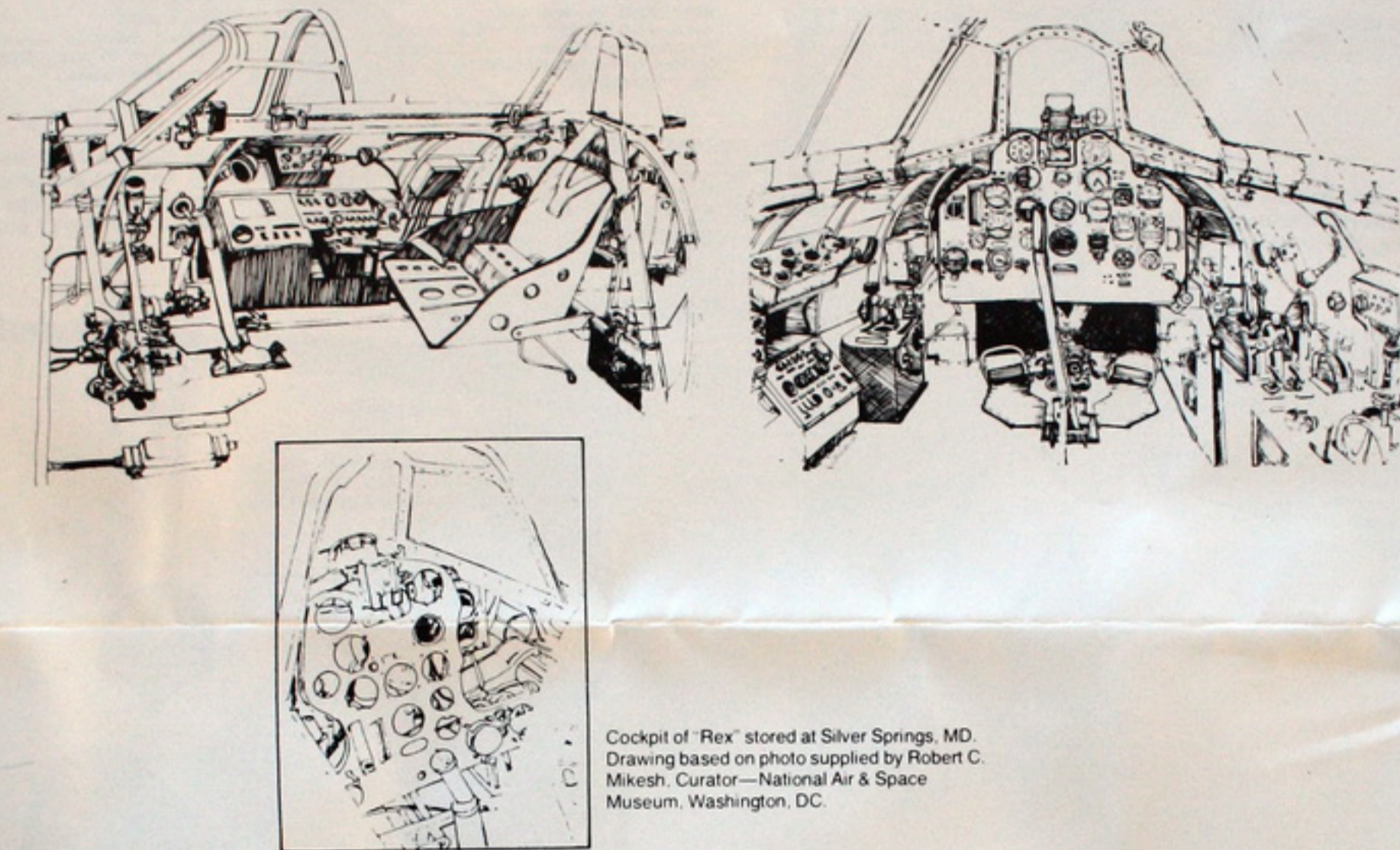
川西 水上戦闘機
[強風] 一型 (N1K1)
[REX]

Sasebo Kokutai, early April 1945. Lt./JG Seiya Oi claimed one F4U "Corsair" in this plane which was also used as an interceptor against China-based B-29s. Standard late-war scheme: upper surfaces Black Green (N1); lower surfaces Light Gray (N10); Orange-Yellow (N15) leading edge recognition panels. Red warning stripe outlines ailerons. White tail code and trestle marks. Red-Brown (N12) spinner and prop fronts, with yellow tip stripe; prop back is Black. Center float has Red prop warning stripe. Oxidized exhaust stubs. Red *Hinomaru* with White border on upper wing & fuselage; plain Red on underside of wing. Cockpit interior "pea green"; balance of interior is Silver. Instrument panel, dials, gunsight matt Black. Other known numbers in the Sasebo unit included: 121, 132, 133, 134, 135.

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- Japanese Navy Wings of the Second World War – Koku Fan Special, 1974
- Maru Mechanic Nos. 1, 21, 43
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- Profile Publication No. 213 – “Rex” & “George” by Rene J. Francillon
- War Planes of the Second World War: Floatplanes, Vol. 6 by Wm. Green – Doubleday

Interior drawings based on Maru Mechanic “George” 11 & 21 illustrations; revised according to “Rex” at Nimitz Museum.



Cockpit of “Rex” stored at Silver Springs, MD. Drawing based on photo supplied by Robert C. Mikesh, Curator—National Air & Space Museum, Washington, DC.

CONSTRUCTION NOTES, HINTS & TIPS: Please read before you proceed!

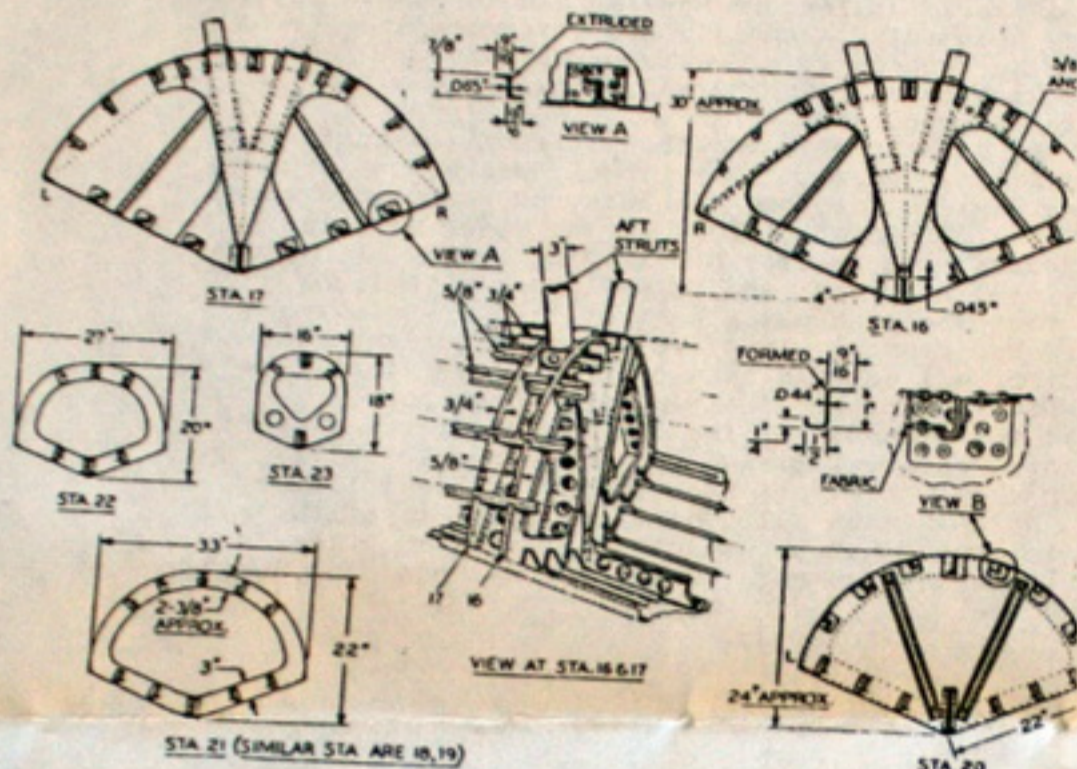
1. The WINGS “Rex” is an entertaining aircraft to build and when finished, in approximately 12-15 hours, produces a highly pleasing and faithful replica.
2. Standard vacuform techniques apply: scribe—don't try to cut—around parts, “snap” from sheet, sand rigorously on flat surface with #240 Wet-N-Dry sandpaper progressing to #600, make frequent fits, affix with liquid glue, fill seams with Elmer's Water Based Wood Filler, 3M Acryl-Blue Glazing Putty, green stuff, or equivalent, and prime, finish and decal as with any kit.
3. Prepare clear canopy before cutting out corresponding location in fuselage to assure perfect final fit. Eventually mount clear part with white glue; if desired, lightly “paint” it with Future Acrylic Floor Wax for extra clarity.
4. Decide whether to build Prototype (long spinner, two 2-blade contra-rotating props, single exhaust outlet per side); Early Version (3-blade prop, single exhaust per side); or, Late Version (3-blade prop, row of individual exhausts per side). If Prototype, do NOT cut off spinner molded to cowl on styrene sheet; add 4 prop-blades from spares box. For either Early or Late version, cut off spinner from cowl and substitute metal spinner and props supplied. Cut circular piece from scrap styrene, glue inside cowl opening before mating fuselage halves to become mount for metal spinner. Use appropriate size hollow rod for exhaust pipes.
5. Open cowl gills for pleasing “at rest” attitude. To achieve “open” effect, cut out duplicate gill flap chips from scrap; “flatten” one back edge with file and glue chip on edge in place. Or, cut gill flaps from some thin, metal-source (such as a bottle cap) and glue into scribed position for a nice candid touch.
6. Construction is very straightforward. There are no tricky pitfalls. Just be aware not to slice off wing fillet from fuselages when trimming out bottom “X” portion! We suggest that some sort of interior be fabricated in addition to the scribed floor, rudimentary seat and instrument panel supplied. Drawings above enable a super detailed cockpit but even such things as masking tape strips for seat belts, bent pin control stick and looped stretched sprue for the black rudder bar and leather stirrups are all simple, but effective, additions.
7. To clean small burrs and to polish the supplied metal parts, we recommend using a Creations Unlimited “Flex-I-File” or fine grade steel wool or small file. If building a Prototype version, buff prop for natural metal effect. Glue all metal parts to plastic with cement such as Duro Super Glue.
8. Complete model by adding special details: pitot from two sizes of tubing; antenna wire from stretched sprue; exhaust pipe stubs and inner-cowl machine guns from hollow rod; headrest and gunsight from scrap; hand-paint tail codes with extra-fine red sable brush. Use Hinomaru from IPMS/USA decal sheet (\$4.50; order from IPMS/USA Special Products, P.O. Box 480, Denver, CO 80201). REMEMBER—these planes often serviced under the hot tropical sun with the result that the under wing hinomaru were bright red, the fuselage hinomaru were partially weathered and the top side insignia had weathered badly. All positions are NOT the same red unless you are modeling a factory fresh “Rex”!!! Keep this tip in mind should you model a P-40 in Flying Tiger scheme—oxidization also severely marred the upper side national Chinese emblems while the under wing emblems looked “good as new”. Happy modeling!

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Advance CP, Hq. Alaska Defense Command
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FOR MILITARY INTELLIGENCE, G-2, I & I DETACHMENT

防衛研修所

OFFICE OF CHIEF OF NAVAL OPERATIONS
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RECORD OF TRANSLATION

OFFICE OF STRATEGIC SERVICES

From a confidential source, this agency has received the following report, dated July 10, 1942, concerning airplane engines and parts manufactured in Japan:

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