

CONVERTING A REVELL GATO TO A MARE ISLAND BOAT

by Ted Swider

NOTE: Though there were two basic plans, Electric Boat (EB) and Navy (Portsmouth and Mare Island), "Mare Island" is used specifically here to distinguish between any small yard differences, but also refers generally to Portsmouth plans.

1. Kit Described
2. Discernable Differences
3. Alterations Necessary
4. Detail Level

The Revell WWII Gato Submarine Kit:

This is a 1/72 scale plastic injection molded kit with both raised and engraved detail. The kit part assembly procedure is well thought out resulting in a sturdy, easy to assemble model. The detail is, as in most kits, artfully done in some areas and less than accurate in others. Researching the subject revealed two basic designs: the Navy Department Portsmouth Design and the Electric Boat Company Design. The kit is based on the USS Cobia (based in Manitowoc), an Electric Boat design. The boat designs appear to be the same, with only non-critical differences to the visible exterior. As the war progressed, all boats were altered as combat experience and engineering advances dictated. Modifications were carried out in many different locations and the boats themselves were built in several different yards. The basic design recognition features persisted throughout the war with no two boats exactly the same. Sister boats built side by side in the same yard showed differences. This kit is an example of an Electric Boat design, depicting the basic fit at the war's end. As such, it can be modified slightly to represent many of the E.B. Designed boats. In order to represent a Portsmouth Design, modification requirements increase greatly.

PLAN (top view) DIFFERENCES

The Discernable Differences:

1. Foredeck
 - a. Most access hatches different and in different locations.
 - b. 2nd Air vent with screen missing
 - c. Bolted cover missing
 - d. Air venting holes missing
 - e. Roller cleats off location
 - f. Capstan off location
 - g. Wrong style marker buoy cover
 - h. Forward hatch off location
 - i. Wood decking short by 39.75 ft.
 - j. Bow cleat missing

2. Mid deck
 - a. No deck extension at fwd deck gun location
 - b. Bridge/fairwater incorrect style and location
 - c. Deck hatch aft of fairwater missing
 - d. No deck extension at aft deck gun location
 - e. Wood deck short by 1.5 ft.

3. Metal afterdeck
 - a. Vent holes too small
 - b. Vent hole pattern inaccurate
 - c. Access covers and deck panels wrong size and off location
 - d. Wrong style marker buoy cover
 - e. Aft deck hatch off location
 - f. Aft deck hatch base plate incorrect shape
 - g. Capstan off location
 - h. Air venting holes on deck roundover missing
 - i. Air venting holes on turtledeck missing
 - j. Bolted cover on pressure hull missing
 - k. Prop guards not used operationally

PROFILE (side elevation) DIFFERENCES

1. Bow
 - a. Torpedo outer doors inaccurate
 - b. Bow buoyancy tank drain holes inaccurate
 - c. Anchor recess inaccurate
 - d. Forward dive plane recess inaccurate
 - e. Limber hole size and pattern inaccurate

2. Mid Casing
 - a. Long open drain slot not used
 - b. Detail missing

3. Aft Casing
 - a. Oval pattern holes on aft third of side plating missing
 - b. Exhaust ports, etc. missing
 - c. Turtledeck side venting holes missing
 - d. Lower torpedo tube bulge inaccurate
 - e. Tube outer doors inaccurate

ALTERATIONS NECESSARY

1. The Foredeck:

The many hatches must be removed and replaced by correct access covers made from sheet styrene. The missing vent may be added by substituting a resin casting made from the existing vent. A bolted cover must be made from sheet styrene. Air venting holes may be located and drilled. The capstan must be removed and replaced later. The marker buoy cover must be removed. The forward hatch location is less than 12" off, and can be deemed acceptable by some modelers' standards. The wood deck must be extended and may be accomplished by casting some resin deck from the area behind the fairwater and shaped to fit. More than one section may be required.

2. The Mid deck:

A deck extension must be added made from styrene sheet and decking resin. The bridge/ fairwater is off and must be rebuilt from styrene sheet and shapes to achieve accuracy. Since the location and shape are different, some deck scribing may be needed. The deck hatch must be scribed into the wood decking in the proper location. The aft deck extension must be built using styrene sheet and resin decking casting pieces. The wood decking may possibly be extended by scribing for greater accuracy.

3. The Metal Afterdeck:

This deck presents the greatest challenge. The size and pattern of the vent holes grossly incorrect, and the best solution would be to construct a new deck using styrene sheet. The panel and access covers likely need to be scribed as well. The deck roundover holes can be located and drilled. Air venting holes can be located and drilled in the turtledeck, and the bolted cover made using styrene sheet. The locator holes for the prop guards can be eliminated by filling and sanding.

DETAIL LEVEL

The kit parts seeming to lack detail are: the superstructure (side) plating, guns, periscopes, hatches, torpedo tube doors, main hull, to name a few. The raised weld seams on the main hull may or may not be accurate regarding size and placement. Various drain holes (eg. anchor well) are missing. Flood valves on the hull bottom are not represented. The bilge keels may be accurate but there's very little data out there to confirm. Close examination of resource material will show up many areas for improvement. On the whole however, this kit is very well done.

There are numerous opportunities to add significant details to this kit. Quality research material is essential to aid in the determination of what should be changed. The challenge is greater due to the relatively small scale of this kit. Each modeler should evaluate his own level of talent and expertise regarding detail application. There are aftermarket sources for parts and upgrading, and I'm fairly confident that a source will come up with an appropriate, but expensive, bridge/fairwater cast in resin. I feel photo-etched brass parts will come along as well. I think we'll see brass decking and more drilling and scribing templates. Presently, some parts are available to fit the E.B. design boats. I predict that with the popularity of this kit, detail parts will follow if you are patient.