

## Marine Protector Class

Note: This section is an excerpt from my June 2008 – Essay first compiled For the February 2004 meeting of the Naval History and Research Associates (NHARA) – Photos are Official USCG Photos except as noted in captions.

They are named for sea creatures which fly or swim. And, they pack a lot of performance and technology into their 87-foot hulls. These modern, attractive and speedy cutters are the newest and most numerous patrol craft in the U.S. Coast Guard inventory. Meet the **Marine Protector class**. All were constructed at Bollinger Shipyards including two for the Armed Forces of Malta and two for the Yemeni Navy.



Maltese patrol craft **P51** shown in 2004. AFM Photo



**P52** underway off of Valletta in 2006. AFM Photo



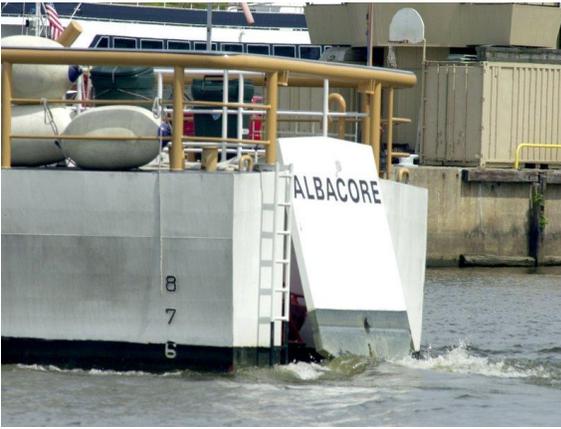
Pair of boats at their transfer to Yemen in 2011

### 87-Footer Characteristics

Builder	<a href="#">Bollinger Shipyards</a>
Length	87'
Beam	19' - 5"
Draft	5' - 7"
Speed	25 knots
Armament	2-50 cal. M.G.*
Range	900 nm
Endurance	3 Days
Capabilities	Operations: SS5 RHIB launch: SS5
Fuel Capacity	2800 gals
Towing Capacity	200 tons
Engines	(2) MTU 8V396TE94
Screws	5-Blade Fixed Pitch
Crew	10 (any gender mix)
*Notes	The four boats which are stationed at Kitsap, WA and Kings Bay, GA submarine bases have an extra remotely operated 50 cal. m.g.



The first unit of the class, **Barracuda WPB-87301**



The **Albacore WPB-87309** and her sisters share an innovative system for the launch and recovery of a rigid hull inflatable boat (RHIB), using a stern ramp. This permits boat operations in up to sea state 5, a distinct improvement as compared to the 82-foot **Point Class** vessels which the **Marine Protectors** have replaced. In fact the system has proven to be so useful that the subsequent designs for new cutters also feature similar stern ramp boat handling.



The RHIB small boats carried by the **Marine Protectors** are powered by diesel pump-jet engines and eliminate the necessity to carry

gasoline for the outboard motors except for a small emergency supply to assist distressed boaters. This is a distinct advantage both from the fire risk standpoint and for the ease and simplicity of fuel storage. Now the same fuel is used by both the 87-footers and their small boats.

The **Marine Protectors** are also more user friendly from several other perspectives and especially in providing better habitability for the crew. The degree of automation and the high level of technology found in the **Marine Protectors** make them easy to navigate and simplify their routine maintenance.



The bridge provides 360-degree visibility and can be manned underway by just two people. The high degree of computerization aids in functions like search and rescue and the new radar and satellite communication and navigation systems improve the coordination of operations with other units and provide highly accurate positional reports. In any kind of weather, day or night, they can operate safely in the treacherous coastal and inshore waters of the American coastlines.

**Vessel List 87-foot Patrol Boats**

**Displacement:** 91 tons full load

**Dimensions:** 87 x 17 x 6 feet/26.5 x 5 x 1.8 meters

**Propulsion:** 2 diesels, 2 shafts, 2,680 bhp, 25 knots

**Crew:** 10 + 1 transient **Armament:** 2 12.7mm MG

**Concept/Program:** A new, smaller patrol boat meant to replace the "Point" class boats in ports which cannot accommodate "Island" class boats. The boats have a stern ramp for a small boat, rather than the traditional hoisting boom or crane. A total of 73 boats have been authorized and funded so far including 6 currently under construction.

**Builders:** Bollinger SY, Lockport, LA.

Number	Name	Year	Homeport	Notes
WPB 87301	Barracuda	1998	Eureka, CA	
WPB 87302	Hammerhead	1998	Woods Hole, MA	
WPB 87303	Mako	1998	Cape May, NJ	
WPB 87304	Marlin	1999	Ft. Meyers, FL	
WPB 87305	Stingray	1999	Mobile, AL	
WPB 87306	Dorado	1999	Crescent City, CA	
WPB 87307	Osprey	1999	Prt. Townsend, WA	
WPB 87308	Chinook	1999	New London, CT	
WPB 87309	Albacore	1999	Little Creek, VA	
WPB 87310	Tarpon	1999	Tybee Island, GA	
WPB 87311	Cobia	1999	Mobile, AL	
WPB 87312	Hawksbill	2000	Oceanside, CA	
WPB 87313	Cormorant	1999	Ft. Pierce, FL	
WPB 87314	Finback	2000	Cape May, NJ	
WPB 87315	Amberjack	2000	Port Isabel, TX	
WPB 87316	Kittiwake	2000	Nawiliwili, HI	
WPB 87317	Blackfin	2000	Santa Barbara, CA	
WPB 87318	Bluefin	2000	Ft. Pierce, FL	
WPB 87319	Yellowfin	2000	Charleston, SC	
WPB 87320	Manta	2000	Freeport, TX	
WPB 87321	Coho	2000	Panama City, FL	
WPB 87322	Kingfisher	2000	Mayport, FL	
WPB 87323	Seahawk	2000	Clearwater, FL	
WPB 87324	Steelhead	2000	Port Aransas, TX	
WPB 87325	Beluga	2000	Norfolk, VA	
WPB 87326	Blacktip	2000	Oxnard, CA	
WPB 87327	Pelican	2000	Morgan City, LA	
WPB 87328	Ridley	2000	Montauk, NY	
WPB 87329	Cochito	2001	Little Creek, VA	
WPB 87330	Man-O-War	2001	Galveston, TX	
WPB 87331	Moray	2001	Jonesport, ME	
WPB 87332	Razorbill	2001	Gulfport, MS	
WPB 87333	Adelie	2001	Everett, WA	
WPB 87334	Gannet	2001	Fort Lauderdale, FL	
WPB 87335	Narwhal	2001	Newport Beach, CA	

WPB 87336	Sturgeon	2001	Grand Isle, LA	
WPB 87337	Sockeye	2001	Bodega Bay, CA	
WPB 87338	Ibis	2001	Cape May, NJ	
WPB 87339	Pompano	2001	Gulfport, MS	
WPB 87340	Halibut	2001	Marina Del Rey, CA	
WPB 87341	Bonito	2001	Pensacola, FL	
WPB 87342	Shrike	2002	Cape Canaveral, FL	
WPB 87343	Tern	2002	San Francisco, CA	
WPB 87344	Heron	2002	Sabine, TX	
WPB 87345	Wahoo	2002	Port Angeles, WA	
WPB 87346	Flying Fish	2002	Boston, MA	
WPB 87347	Haddock	2002	San Diego, CA	
WPB 87348	Brant	2002	Corpus Christi, TX	
WPB 87349	Shearwater	2002	Portsmouth, VA	
WPB 87350	Petrel	2002	San Diego, CA	
<b>WPB 87351</b>	<b>P-51</b>	<b>13 Nov 02</b>	<b>Built for Malta</b>	
<b>None</b>	<b>P-52</b>	<b>7 Jul 04</b>	<b>Maritime Squadron,</b>	
			<b>A.F.M.</b>	
WPB 87352	Sealion	19 Nov 03	Bellingham, WA	
WPB 87353	Skipjack	17 Dec 03	Galveston, TX	
WPB 87354	Dolphin	14 Jan 04	Miami, FL	
WPB 87355	Hawk	11 Feb 04	St. Petersburg, FL	
WPB 87356	Sailfish	10 Mar 04	Sandy Hook, NJ	
WPB 87357	Sawfish	7 Apr 04	Key West, FL	
WPB 87358	Swordfish	9 Mar 05	Port Angeles, WA	
WPB 87359	Tiger Shark	6 Apr 05	Newport, RI	
WPB 87360	Blue Shark	4 May 05	Everett, WA	
WPB 87361	Sea Horse	1 Jun 05	Portsmouth, VA	
WPB 87362	Sea Otter	29 Jun 05	San Diego, CA	
WPB 87363	Manatee	27 Jul 05	Ingelside, CA	
WPB 87364	Ahi	24 Aug 05	Honolulu, HI	
WPB 87365	Pike	21 Sep 05	San Francisco, CA	
WPB 87366	Terrapin	19 Oct 05	Bellingham, WA	
WPB 87367	Sea Dragon*	31 Oct 07	Kings Bay, GA	
WPB 87368	Sea Devil*	6 Feb 08	Bangor (Kitsap), WA	
WPB 87369	Crocodile ex-Snapper	13 Aug 08	St. Petersburg, FL	
WPB 87370	Diamondback	17 Sep 08	Miami, FL	
WPB 87371	Reef Shark	22 Oct 08	San Juan, PR	
WPB 87372	Alligator ex-Crocodile	26 Nov 08	St. Petersburg, FL	
WPB 87373	Sea Dog*	31 Dec 08	Kings Bay, GA	
WPB 87374	Sea Fox*	4 Feb 09	Bangor (Kitsap), WA	

\*USN Navy funded for service as security at East & West Coast SSBN Bases.  
Yemeni Navy units are **WPB87375 Sana'a and 87376 Aden**



Arial view of **Cormorant** showing small boat



**Haddock's** stern showing 5-bladed props



Cozy but utilitarian mess decks of the **Halibut**



**Albacore's** small boat being hoisted aboard



**Beluga WPB-87325** underway showing 50-cal. M.G.



**Sockeye WPB-87337** mans the rail



***Sealion WPB-87352*** runs trials in Gulf of Mexico



***Stingray WPB-87305*** from Mobile one of the first



***Shearwater WPB-87349*** escorts ***Teddy Roosevelt***



***Osprey WPB-87307*** just cruisin' along



***Flying Fish WPB-87346*** and Lady Liberty



***Chinook WPB-87308*** from New London, CT

As previously mentioned, the 87-foot **Marine Protector CPB** are designed to operate in conditions up to Sea State 5. They are equipped with two MTU twin-turbocharged, eight cylinder diesel engines which are rated at 1,500 horsepower each. They have twin five-bladed twin screws and can make a steady 25 knots.

The propulsion system also includes a slow speed drive capability that allows the **CPB** to safely maneuver in restricted waters as well as tow smaller vessels. With its fuel capacity of 2700 gallons, the **CPB** can sustain operations for up to 72 hours.

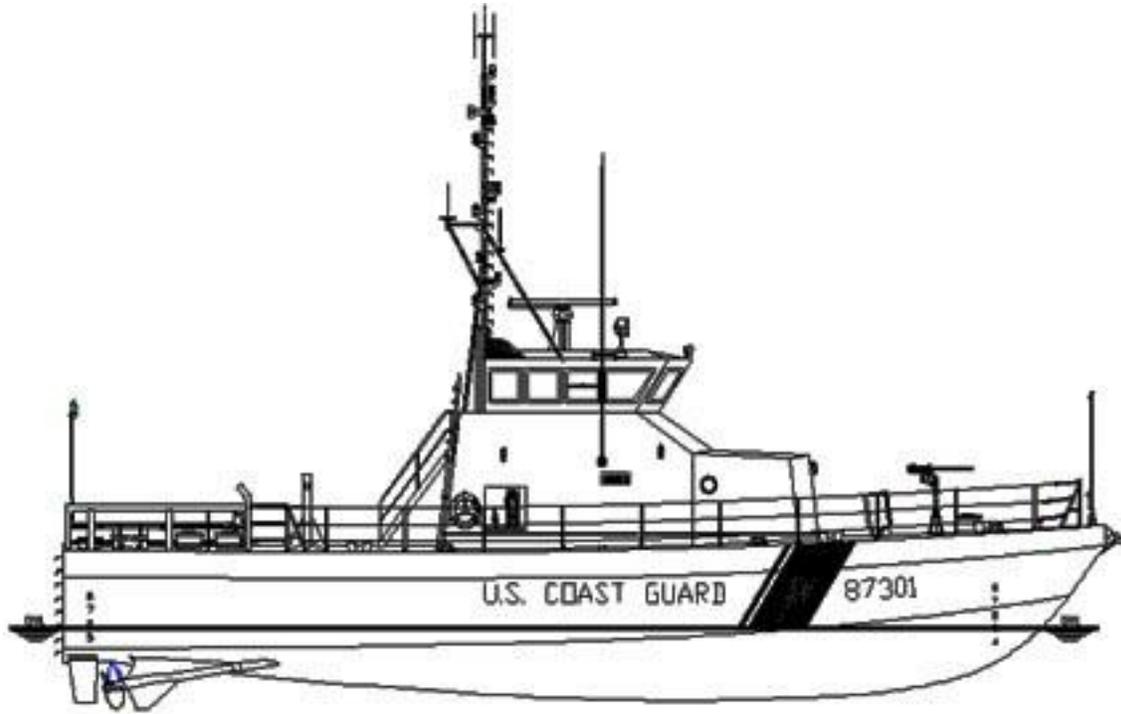
The pilothouse of the **CPB** is a technological masterpiece, housing a full complement of electronic gear. It is equipped with a fully integrated electronic charting system and autopilot. The **CPB** is also equipped with the Coast Guard's latest AN/SPS-73 surface search radar.

Crew comfort was a primary factor influencing the design of the **CPB**. Unlike past patrol boats, the **CPB** can accommodate any mix of male and female crew members within its 11-person complement. Each crew stateroom is equipped with internal phones and a potable water sink. There are two restrooms facilities and two showers. The mess deck has seating for nine crewmembers and is equipped with a television, VCR and stereo for crew relaxation.

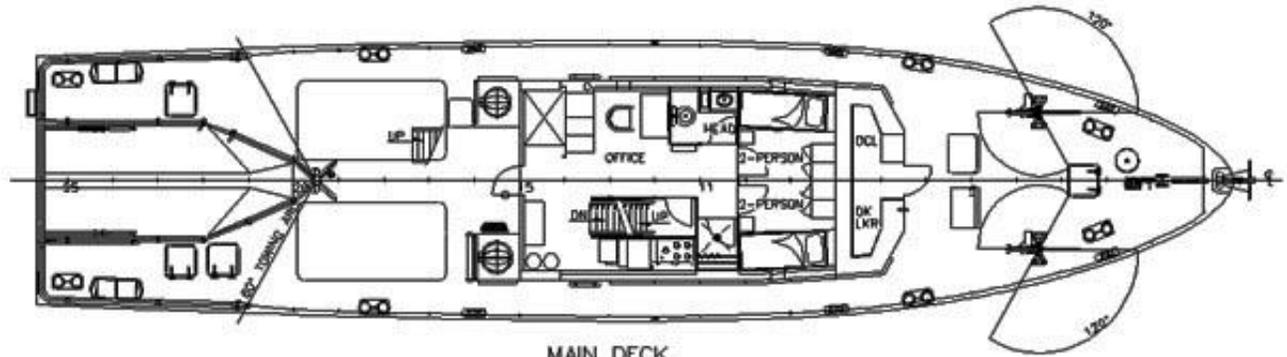
Small arms are carried and two 50-cal. Browning, air cooled machine guns are mounted on the forecastle. Additional armament may be added as needed for new missions. The Marine Protectors are versatile and highly capable vessels. They personify, more than any other vessels afloat today, the Homeland Security role of the Coast Guard in patrolling our coastlines, bays and inlets, and busy ports.



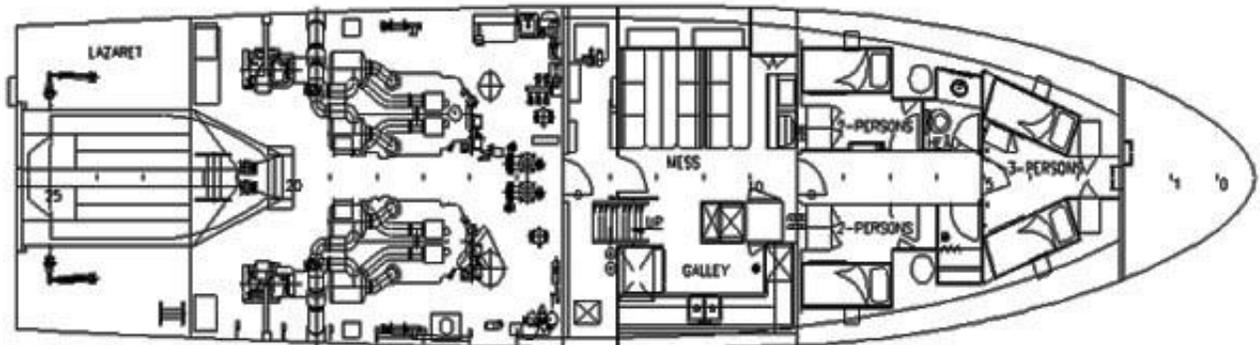
**Narwhal WPB-87335** patrols near the cruise ship piers in Southern California



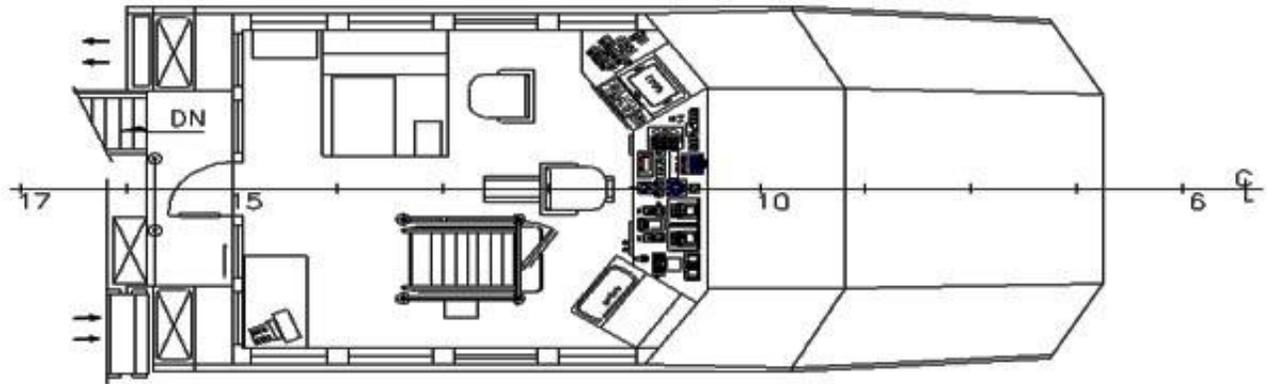
OUTBOARD PROFILE



MAIN DECK



HOLD PLAN



**BRIDGE PLAN**

The pilot house of the **Marine Protector Class** is a dramatic improvement over the predecessor **Point Class** cutters. The fully integrated system is housed in an area of 205 square feet as opposed to the 42 square feet on the **Point Class**. The command and control console stretches the full width of the pilot house and has been ergonomically designed to accommodate varying crew member heights, since the crews are typically represented by 5% female and 95 % male. Visibility is a full 360 degrees with no obstructions from mast, exhaust, or other hull structure. There are seventeen heated windows, including two sliding windows, to ensure that the commanding officer has a full view of the surrounding area.

The navigation station faces forward and can accommodate full sized charts without folding. The Electronic Chart Display (ECDIS) with radar overlay, is visible from the Navigation station, the helmsman's position, and the Commanding Officer's chair. The ECDIS system is a Windows-based computer system that has pre-programmed search and rescue patterns including trackline, expanding square, and sector searches.

The vessel has a ship's office to house the U.S. Coast Guard Standard Workstation (Personal Computer) and a fiber optic Local Area Network (LAN) that can be used internally or externally when connected to a shore tie. Accommodations for two safes for the storage of classified material are also provided in the ship's office. The 21<sup>st</sup> Century goes to sea in **CPB**.

The vessel's internal and external communications system is a fully integrated system developed originally for the Canadian Coast Guard and includes features for:

**Internal Communication:** Telephone, General Announcing, Cease Fire Alarms, and General Alarms

**External Communication:** Loud hailing and Fog horn

With all these modern conveniences it almost makes your truly yearn for some **CPB** duty. They don't carry a corpsmen (now called a Health Service Technicians in the CG) on board these beauties anyway. Just a Skipper, XO, Food Service PO (cook), 4 engineering types, and 3 deck force (operations) types – for a total of 10. Cross training and duty sharing is the order of the day. I'd expect that even the cook has to handle weapons and do bandages in a pinch.



*Sealion* WPB-87352 enroute to her homeport of Bellingham, WA in early 2004



*Beluga* WPB-87325 near Washington, DC in June 2004



*Ibis* WPB-87338 fore and aft showing her boat ramp aft and her pair of 50-cal. MG forward. Note the twin outboard powered craft shown is **NOT** the small boat carried by the *Ibis*. Rather these photos were likely taken from on board her small boat and the 25-foot SAFE boat was just alongside to exchange pleasantries.



Commissioning of *Terrapin* WPC-87366, 23 Mar 2006 at Bellingham, WA. She was to have been the final 87-footer but since that time 8 more have been built (4 with USN funding) in the interest of Homeland Security.



*Ahi* WPC-87364 off the coast of Oahu, HI, 21 February 2006.



*Hawkbill WPB-87312*, during Fleet Week 2005 in San Francisco watching the Blue Angels perform.



*Petrel WPB-87350*, Helo Rescue Training at San Diego, 18 Nov 2007.



The new 87-footer, *Sea Devil* WPB-87368, at sea in the Pacific during refueling from *Boutwell* WHEC-719.



Last but not least, *Sawfish* WPB-87357, At Key West, 23 February 2006, Photo by the author.