SMALL BOAT STATIONS & SURF CAPABLE BOATS

Richard C. Hiscock, 19 May 2000

As we enter the 21st Century the future of Coast Guard Small Boat (Lifeboat) Stations particularly on the East Coast of the U.S. is in doubt. Technological solutions – that is to say fast, high tech boats – proposed by the Coast Guard cannot make up for existing and projected shortfalls of **surf** capable lifeboats or experienced personnel. Failure to understand the limits of technology will have a devastating impact on the Coast Guard's ability to respond to life-threatening emergencies in heavy weather.

No where is the problem of 'downsizing' Motor Lifeboat (MLB) resources better illustrated than in Group Woods Hole – in Southeastern Massachusetts and Rhode Island – where the Coast Guard is attempting to use technology (the new 47-foot MLB) to 'streamline' the delivery of Search and Rescue (SAR) services. The result is not in the best interests of the Coast Guard or the public it serves.

The past is present

There is historical precedent for the elimination ('downsizing') of lifesaving stations, but there are limits to the technology 'fix.' In the end it always comes down to dedicated, experienced personnel who have the right equipment to respond to an at-sea emergency. As one Chief Petty Officer said not too long ago, 'Until we can teleport them back, we have to go get them.'

'Downsizing' has been going on for most of the 20th Century. During the years immediately following the establishment of the Coast Guard in 1915 the **thirteen** lifesaving stations on the back (ocean) side of Cape Cod were still in full operations. In addition there were four Stations on Nantucket, and several on Marthas Vineyard, and a new Station was built at Cape Cod Canal.

Beginning in about 1916 with the development of motor lifeboats there was a need for lifeboat (as opposed to lifesaving) stations that had protected harbors where the motor lifeboat could be safely launched or moored. However, the lifesaving stations that launched surfboats directly into the surf and used a beach cart to effect rescues were not all closed until after World War II.

Over the years, as the capability of motor lifeboats and air rescue improved, the number of lifesaving/lifeboat (small boat) stations has been reduced. All but two of the original thirteen Life-Saving Stations along the Outer-Cape have been closed. Pulling surfboats and beach carts have been retired to museums. But these changes came slowly. (Old Harbor Station was not closed until 1944, and Nauset Station was still in operation into the 1950's.)

In the early 1960's the prototype 44-foot Motor Lifeboat (CG-44300) was extensively tested on the East and West coasts, and CG-44301 (the first production boat) was assigned to Station Chatham. From that time until the late-1990's there were six Stations on the Cape and the Islands: Canal, Race Point (now Provincetown), Chatham, Woods Hole, Brant Point (Nantucket), and Menemsha (Marthas Vineyard). Additional Stations in the Group Woods Hole Area of Operation (AOR) were: Block Island, Point Judith, and Castle Hill. Each of these Stations was equipped with at least one 44-foot MLB, a Utility Boat (UTB), and various non-standard small boats. Chatham with Monomoy Point dividing its AOR, had two 44s, but has never had a UTB as the area is just too rough.

The present is future?

In the late 1980's the Coast Guard began development of a new MLB that was to be a multi-mission craft designed for SAR, Law Enforcement (LE) and other missions. After years of testing – primarily on the West Coast – a contract was awarded, in 1995, to build the first of the new 47-foot MLBs. There is no doubt that the 47-footer is a big improvement over the 44-foot MLBs. They are powerful, and provide 'creature comforts' for the crew when they are on long offshore missions.

But, surprisingly the Coast Guard designed a Motor Lifeboat for use throughout the United States that has completely unprotected running gear – propellers and rudders. They neglected the fact that they routinely operate Motor Lifeboats on the East Coast where the 'bars' are shallow, thus there are places where it is too risky to operate these million dollar boats. Nevertheless, the Coast Guard believes it can 'replace' 44-foot

MLBs with 47-foot MLBs on a less that one-for-one basis, with no suitable boat for use that those Stations where there are no plans for a 47-footer. To date fifty-one 47-foot MLBs have been delivered, with a total of 93 projected for delivery by 2002.

In Group Woods Hole there are now two 47-foot MLBs with two more scheduled for the future. Station Provincetown received CG-47209 in 1997 and CG-47238 arrived at Station Woods Hole in 1999. Two more 47s are scheduled to be delivered in 2001, one to Brant Point and one to Rhode Island (either Castle Hill or Point Judith). When the delivery of 47-footers to Group Woods Hole is complete next year there will be only four MLBs in the Group. Those who think that four 47-footer can do the work of 10 44-footers are living in a fool's paradise. Why, because technology cannot overcome the elements or the limitations of personnel, and adequate equipment.

But, 'downsizing' began even before the arrival of the 47-footer at Provincetown and long before the arrival of a 47-footer at Brant Point. In 1996 Station Chatham lost one of its 44s. It was replaced with a non-standard 36-foot RHB that has proved to be less than reliable and not capable of handling the surf conditions of Chatham Bar. When the 47-footer replacement project is finished, Station Chatham – the station with a breaking bar inlet to rival any on the East (or West) Coast and a divided AOR and **TWO** MLBs – will have **NO** Motor Lifeboats.

The argument throughout the Coast Guard and in Group Woods Hole in particular is that because the 47-foot MLB is faster and more capable AORs can be expanded and redefined. For example, the reasoning goes, the 47-foot MLB at Provincetown (and Brant Point when it gets here) can cover Station Chatham's AOR. It is over 40-miles from Station Provincetown to the 'C' buoy off Chatham Harbor, and just about two-hours from Station Brant Point to Chatham in good weather.

There are several fallacies with the thinking that the new, go-fast, 47-footer can cover more area than the venerable 44-footers, and therefore there is no need for a surf capable boats at Stations with breaking bar inlets. (The proposed Medium Response Boats will not be surf capable.)

- The 44-footers were slow (<15 knots), and the 47's are reported to do in excess of 25 knots, but there is no appreciable advantage in speed over the ground when sea state is ~10-feet or greater. Thus the area that can be covered by a 47-footer is NOT significantly greater than that covered by a 44-footer. A 47-footer from Brant Point will not be able to respond to an emergency off Chatham when it is blowing a Northeast gale.

- Successful rescue on a breaking bar is generally executed from the 'inside-out.' That is the rescue craft is better able to assist a vessel in distress by approaching from inside the inlet. A MLB – whether it is a 44 or a 47 – responding from a distant location would first have to transit an unfamiliar and dangerous bar and then affect the rescue. Without daily knowledge of the bar conditions the response will be delayed and probably impossible at night. Nevertheless, the Coast Guard assumes that a 47-footer – from Brant Point (on Nantucket) – can effectively respond to and successfully prosecute a case on Chatham Bar

- On the East Coast stations with 47-foot MLBs will be responsible for an appreciably increased area. The intimate local knowledge that makes local lifesaving stations successful will be lost and along with it the ability to prosecute cases in these difficult areas.

- With larger areas to cover it is possible that the needed MLB will not be available because it is already on a mission in another part of its expanded AOR. For example Station Brant Point's 47-foot MLB will be responsible for an area from the east and south side of Marthas Vineyard to Monomoy Point and to the northeast. In the event that the MLB is involved in a case southeast of Marthas Vineyard it will be unavailable to respond to an emergency east of Chatham, and certainly not in a timely fashion.

- The 'two-hour' response policy (as mandated by Congress) is inappropriate in the cold waters of the Northwest Atlantic where the temperature of the water is well below 60°F most of the year. The likelihood of survival for anyone in this water without an immersion suit or liferaft is greatly diminished after approximately 30 minutes, particularly if they are being pummeled by breaking seas. In this

area where the ocean water temperature is always 'cold' – below 70°F – quick rescue is essential. A person in the water of less than 60° F for two hours without protection from hypothermia has only a 50% chance of survival. In water of 70°F an unprotected person will be mildly hypothermic in less than an hour, meaning that they will be shivering and in pain from the cold, and while they may still be alert, they will be numb and unable to help themselves. Two hours is too long in this area of the Atlantic.

The Coast Guard counters all these arguments with 'helicopter to the rescue!' To which those knowledgeable about this – and similar areas – respond, 'what happens when the helicopter can't fly?' To which the Coast Guard responds, 'helicopters can fly from Coast Guard Air Station Cape Cod on all but 5-days a year.'

There are several things wrong with the presumption that helicopters can replace lifeboats. First, it is one thing to say that a helicopter can fly from Air Station Cape Cod, it is quite another for them to successfully prosecute a rescue over the waters around Cape Cod. There are many days when the visibility is zero over the water while it is clear over the land. Further, the weather in recent years has been benign.

Dennis Noble notes, in his book *Lifeboat Sailors*, that "according to the Coast Guard's own published statistics, small boat stations accomplish *53.8* percent of all SAR operations undertaken by the service, Groups performed *19.1* percent, while air stations ranked third, with *10.3* percent." The percentages for Group Woods Hole are similar, with a greater percentage of cases carried out by the small boat stations.

In fact there have been times in the recent past when helicopters were unable to respond promptly to real emergencies.

- In October 1998 a small plane flying from Buffalo, NY to Provincetown with one person on board crashed at sea near the Provincetown Airport – helicopters were unable to fly.
- In January 1999 when the F/V *Cape Fear* sank at the mouth of Buzzards Bay helicopter was delayed due to weather.
- In May of this year the Coast Guard Group Woods Hole spent three and a half hours searching for a recreational boat in Cape Cod Bay. According to press reports, the helicopter involved in the search was "limited to flying around … in hope that the two missing boaters would hear it and thereby better define the search area."

To suggest that helicopters can fill the gap of reduced motor lifeboats assumes first that they are always capable of responding, and second that helicopters can provide the necessary response – if that were true there would be no need for vessels at all.

Even if we accept the premise that there are only 5-days a year when helicopters can't fly, which we don't, in all likelihood it will be on those days that the critical – life-threatening – cases occur. In fact in a report, dated 7 Nov 1996, to the Commander Coast Guard District One, entitled *Station Large Provincetown, Station Small Chatham, A Performance Review*, CDR W. R Grawe, USCG states that "the potential impact of fog conditions (approximately 45 days between June & August) on helicopter support could serve to exacerbate the problem" of responding to emergencies in the vicinity of Chatham.

Further, the AOR of Air Station Cape Cod has been – with the Closing of Air Station Brooklyn – expanded to include all of the First Coast Guard District – that is from the Canadian border to the mid-New Jersey coast, including Vermont!

The end result of all this resource realignment is that many Stations with breaking bar inlets that were adequately equipped with motor lifeboats capable of handling cases in their AOR must now rely on resources from a distance that have little experience or knowledge with the special conditions they may face.

The need for surf capable boats in those areas where there will be no 47-footer is not unique to Group Woods Hole. Up and down the East Coast – Long Island, New Jersey, North Carolina – 44-foot MLBs are being withdrawn with no adequate replacement.

While the Coast Guard may not yet publicly recognize the problem, the marine community obviously does, as the Coast Guard announced that it now plans to provide Station Manasquan on the New Jersey south

coast with a 47-foot MLB. But it took tremendous political muscle by the community there to bring about this change in plans. Fortunately it did not take a tragedy.

Medium response is not the answer

We understand that the Coast Guard has a plan to develop a Medium Response Boat (MRB) to use in areas where the 47-footer, or even the 41-foot UTB is too big, and other non-standard boats such as the 17' to 23' RHIBs are not capable. MRBs would be able to operate in 8-foot seas and up to 25 miles offshore and stay on scene for six-hours. BUT, they would **not be designed for operation in or near surf**.

It will only take one case with an unpleasant outcome to elevate this well understood deficiency to the public's attention. The Coast Guard has a responsibility to address this issue BEFORE it becomes a public relations disaster like the *Sol E Mar* and *Morning Dew* tragedies.

The Coast Guard (or a predecessor organization) has made the mistake of thinking that it was possible to 'do more with less' in this area. The building of the Old Harbor Station in 1897 resulted from a bungled rescue involving the schooner *CALVIN B. ORCUTT* in 1896. In 1988 the fishing vessel *MICHAEL KEVIN* foundered on Chatham Bar. Station Chatham was unable to respond. Two fishermen nearly lost their lives, but were rescued by the fishing vessel *HUNGRY EYES*.

Constant vigilance is necessary at Stations with breaking bar inlets, and there is no substitute for local knowledge. If Coast Guard personnel do not have the intimate local knowledge of their AOR they will fail miserably at the task of searching for and rescuing mariners in distress. The only way to get that local knowledge is to train, train, and train some more using a resource that is surf capable in the waters where those rescues must be carried out.

So the question of what resource will be available to respond to local emergencies at Stations with breaking bar inlets remains.

What's to be done?

Coast Guard Headquarters has initiated Project Kimball to take a close look at issues involving Groups, Aids To Navigation Teams, and Small Boat Stations. Project Kimball and/or the Coast Guard should at the very least –

- Re-evaluate MLB coverage area now that some time has passed since the inception of the 47-foot MLB. The original design and operational assumptions, particularly as they apply to the East Coast, must be challenged and re-evaluated in light of three years worth of operational experience with the new MLB.

- The Coast Guard should establish a small group of knowledgeable people (from the Coast Zone Mission Analysis) to focus on areas with surf, particularly Stations with breaking bars, for the purpose of identifying a **surf** capable resource for use in those places where the MRB will not be adequate to address the localized needs of the area.

In the mean time the Coast Guard should seriously consider rehabbing the remaining 44-footers rather than giving/selling them to private enterprise or foreign governments. There is still plenty of life in these craft and with –

- Re-powering with the engines originally specified or equivalent (Cummins V6-200) or the power plant used by the British RNLI in their 44-foot 'Waveney' MLBs (GM 8V53 or 3208 CAT) either of which would give the boat a speed in excess of 14 knots. (Speed with the existing power plant is no more than 11 knots)
- Equipping with a modern electronics package – VHF, RADAR, GPS, and SOUNDER.
- Minor redesign of the coxswain's flat to provide better crew comfort – eliminate the leaky windows, provide a 'clearview screen' and maybe a new coxswains chair, and
- Replacing as necessary any deteriorated hull plate.

These proven rescue boats could provide very necessary service to the public for a number of years to come – at minimal cost – or at least until the Coast Guard identifies and procures a suitable craft that can fulfill the mission – lifesaving in breaking surf – that the 44-foot MLBs have so nobly carried out for almost forty years.

Where's the money?

The House Appropriations Committee in its report to accompany the "bill making appropriations for the Department of Transportation" proposes to increase the Coast Guard's budget for FY-2001 by at least 10.5%. Further the Committee …

> … expects the Coast Guard to make whatever personnel and organizational changes are necessary to ensure that the small boat stations have an effective voice in resource allocation and staffing decisions.

Now that increased funds are available it is time to begin addressing and resolving the of issue surf capable boats.

COMPARISON OF MLBs PAST, PRESENT & FUTURE
GROUP WOODS HOLE AOR

STATION	**PRE 'DOWNSIZING'**	**PRESENT** (1999-2000)	**FUTURE**
CANAL	1	0	0
P-TOWN	1	1	1
CHATHAM	2	1	0
WOODS HOLE	1	1	1
MENEMSHA	1	0	0
BRANT PT	1	1	1
CASTLE HILL	1	1	1
PT. JUDITH	1	1	0
BLOCK ISLAND	1	0	0
TOTAL	**10**	**6**	**4**

For more on these and other related subjects read Dennis Noble's *Lifeboat Sailors – The U.S. Coast Guard's Small Boat Stations* (Brassy's, Washington, D.C. 2000) and Captain Charles Hathaway's, *From Highland to Hammerhead* (privately published by the author, 2000, ISBN 0308000013). Both give a clear picture of trends that, if allowed to continue, will have a devastating impact on the Coast Guard's ability to respond to life-threatening emergencies in heavy weather.