



Safety at Sea

for Small Fishing Boats and Other Craft

Rupert Elstow



We pray the Lord to preserve
all those who go down to the Sea in ships

...and...

do their business in great waters

Safety at sea for small fishing vessels and other craft is largely a state of mind, supported by a modicum of common sense and a practical approach to leaving the shore in small boats.

This short article is written with the benefit of hindsight, associate membership of the inshore lifeboat crew at Sheringham in Norfolk, England and some observation of the small-scale fishing boats and other small craft that predominate in the fishing business of Southeast Asia. The benefit of hindsight comes from loving the sea, and during a long lifetime of joining the Royal Navy and owning successively several small sailing boats. Having owned and sailed small boats, it is possible to draw conclusions about the ownership and dedication to ownership of many small craft observed around the world, and more particularly, in Southeast Asia. The ownership and use of small boats is, or should be, a matter of pride to the owner, particularly when the owner's income and livelihood is derived from such humble craft. Equally, the state of the craft should reflect the knowledge that if a craft fails while at sea it puts in jeopardy the lives of any and all that make a rescue attempt.

A Dedication to Life at Sea

Internationally there are conventions dedicated to life at sea, notably the constantly updated SOLAS Convention¹, initiated back in 1914, which can guide governments and those responsible for setting regulations and providing infrastructure on what to provide, and on

the maintenance of such provisions. Recognizing this, the SEAFDEC Training Department convened a two-day Safety at Sea workshop in December 2003. This dealt more closely with the specific needs of the small-scale fishermen who are the norm in Southeast Asia. However, the purpose

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of this article is not to rehash SOLAS, but to outline some actions that boat owners may undertake to ensure that the emergency rescue provisions available wherever they are not called upon. Even so, small-scale fishing boats even working within three kilometres of the shoreline mark can get into unforeseen difficulties.

Attention to the Boat

The required actions affecting inshore small-scale fishing vessels and other craft fall into three main categories, the first being unforeseen changes in weather conditions and the need for good design. The second concerns the deterioration of the vessel through natural exposure to salt and sunlight (ultraviolet) attack on the vessel and the gear it carries. The third covers the necessity for additional equipment to be carried to offset danger and to attract attention to a boat in difficulties.

¹SOLAS stands for Safety Of Life At Sea. For more about this convention, see www.imo.org



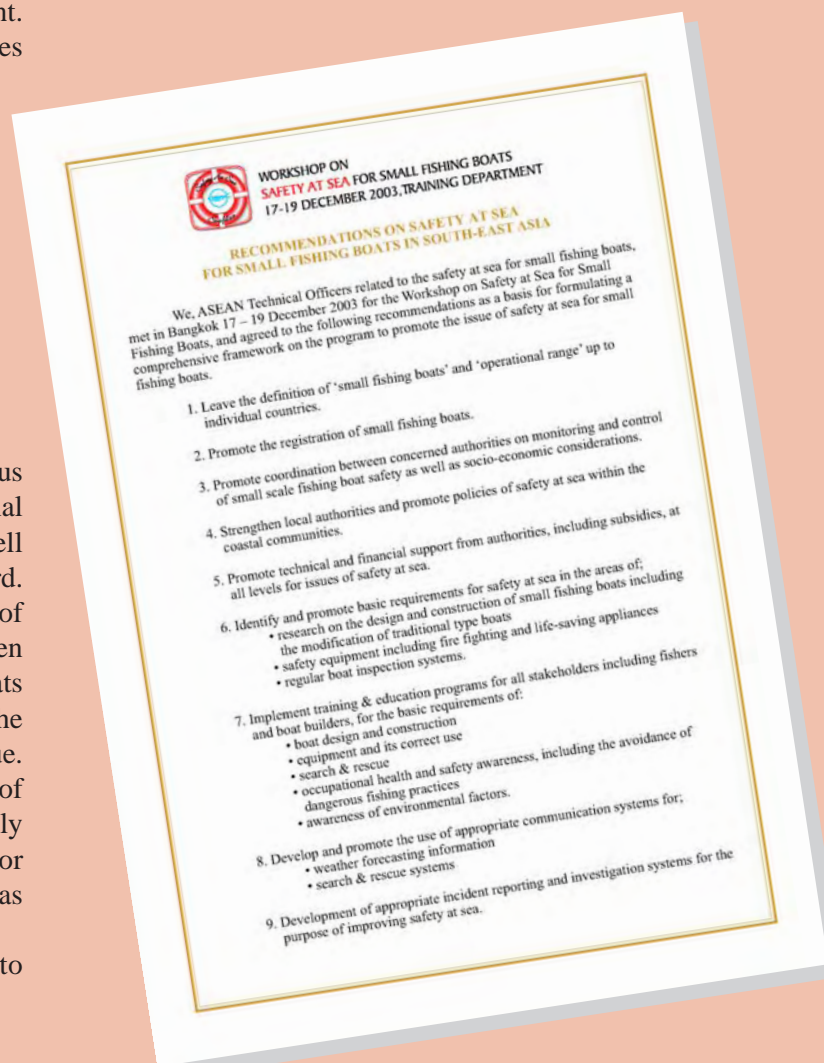
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The first condition may be offset by attention to the boat, the type of boat, its design and permanent equipment. As an example of this a flat-bottomed craft, sometimes

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called a ‘punt’, is not seaworthy, and is positively dangerous in any sea conditions. The boat should be of a conventional round bilge design with a good wide beam (width), well built of salt-resistant materials and with plenty of freeboard. It is also a good idea to install bilge keels on the outside of the bilge, as these aid in stability and are of benefit when hauling the boat ashore. Many small-scale fishing boats seen in Southeast Asia are narrow-gutted, and from the point of view of seaworthiness and safety of doubtful value. If the stern or ‘transom’ of the boat is flat, it should be of adequate thickness to allow the top edge to be smoothly rounded such that a net or gear can be pulled inboard or discharged outboard without snagging or hanging up as this may cause dangerous instability to the vessel.

When all the weight to be carried is taken into





account there should be adequate additional buoyancy provided to allow the boat to float even when completely inundated with water. Normally, this extra buoyancy is installed under the seats or ‘thwarts’. It is often the case when such buoyancy is installed that it takes the form of round sealed cans, mounted under the seats. If the cans are big enough, then the objective can be achieved. However, it may be better to have the buoyancy chambers specially made to fit the internal shape of the boat as this acts to reinforce the rigidity of the hull, especially when a net, heavy or otherwise, is out over either beam in any sort of seaway that will cause the boat to ‘wrack’ or twist. In an ideal world, such chambers should be made of fibreglass, brass, copper or stainless steel, but these are expensive. It is very often the case in Southeast Asia that the top ends of the ribs may protrude through the ‘gunwales’, forming snagging points for fish netting.

The use of long-tails or outboard motors is very common in such small craft, but in any sort of weather these are subject to failure. To guard against this, a pair of oars or paddles should be carried permanently, although the bottom-boards of the boat should be easily removable for use as makeshift paddles if all else fails.

Lastly, one important piece of seagoing equipment is a pump of some form to empty flooded bilges. The pump may be permanently installed, or may be portable and hand-held. Above all, it must be serviceable.

Avoiding Degradation of Wood and Cordage

The second required action concerns attack by salt and sunlight. This action is very much in the hands of the boat owner. In the case of wooden boats, which are the majority of boats in Southeast Asia, protection from sunlight’s ultraviolet rays can adequately be dealt with by a good coat of paint. Here again, where local boats are given a coat of paint it is common to use domestic house paint, but this is not good enough, as the ultraviolet resistance is inadequate. Marine paints are specially formulated to give protection, but are consequently rather more expensive.

A good example of the damage caused by sunlight to unprotected wood

Marine paint gives protection to the wood by preventing the loss of wood’s integrity through being denatured by ultraviolet light. This denaturing can be seen when wood turns a ‘dead’ grey colour. In a working boat, paint can easily be damaged so regular paint and varnish maintenance is a must. Such maintenance applies to both the outside and to the inside of any small seagoing boat.



Some small-scale fishing boats in Southeast Asia

The same degradation is also caused to cordage and rope gear carried. Ropes of natural fibre, nylon, polyurethane, and indeed all forms of plastic, suffer varying degrees of damage and so should be stored out of direct sunlight. This is also true of fish boxes, buckets and any other plastics carried as operational gear. A tarpaulin pulled over the gear can be adequate protection.

Personal Survival

Lastly, there is the question of personal survival and attracting attention from the shore or any other vessel. This principle is known as “to see and be seen”. For example, if night operations are conducted, it makes sense to carry some form of navigational lighting, if only to avoid being run into by other boats. Such lights may be either electric

or fuelled by gas or oil. Some form of light should be visible for 360 degrees around the vessel. In such small boats it is unnecessary to carry green and red lights; a single all-round white light will suffice.

In personal survival, it is sensible to wear, or have immediately available some sort of floatation jacket, preferably not the inflatable type, as these are cumbersome and can easily be damaged in a working environment. Included in the jacket should be a whistle and a small torch for attracting attention. Small survivor kits or packs are available for attracting attention to the boat. As the boats under consideration are small the carrying of distress rockets is probably unnecessary, but red coloured hand-held flares are essential. In the absence of rockets, small

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‘pen-flares’ are available that fire a red star a hundred feet or so into the air. These are cheap, very bright and certainly attract attention.

For distant communication of distress, if affordable, it is a good idea to carry a hand-held transmitter/receiver tuned to Channel 16 on VHF (156.8 MHz) and 2.182 MHz on the Medium Band frequency. Other equipment often included in such packs is a short fishing line complete with hook and feathered lure. This is included because a fish when wrung out will provide a little fresh water from the internal juices and some sustenance although uncooked fish (except for some specific species) is not very palatable (canteen, please note!), but it will sustain. The pack also includes a small handheld compass. If these packs are to be assembled by the user, it is wise to include some form of sunglasses protection, as ultraviolet reflected from water can damage the eyes. Although they are not wholly effective, a shark repellent is also included, as they do constitute a little protection.

Even if fishers are well versed in weather lore, it is in their own interest to listen to whatever weather forecasts are available for his area of operation before they set out on a fishing operation.

Conclusion

In conclusion, the equipment given will be considered expensive, but quality does not come cheaply and also raises the question of what a life is worth, the danger lying not only in the life of the endangered seamen, but also to the lives of their rescuers.

It is also pertinent at this point to draw the attention of the authorities to the SOLAS convention and the provision of coastal rescue coverage, both in terms of zoning and in terms of rescue equipment. Coastguards around the coastlines should be adequately trained in rescue procedures, and should be equipped with adequate and fast rescue boats. As these will operate in a general rescue effort apart from fishing boats, the higher class of hard chine Avon or American Zodiac with outboard engines will work quite well. These are used around the coastlines of the USA, the UK and Australia. However, zoning arrangements should recognize time scales to rescue and the fuel requirements and range of small rescue craft. Governments should also provide an accurately timed and updated radio weather forecasting service, which should take into account identifying areas in whatever zoning arrangement is in place.

In the UK, the lifeboat service is a charity and is maintained wholly by public subscription, including the purchase of boats. The service receives no money from the public purse. The crews are local unpaid volunteers. It is not expected that the same arrangements would be possible in Southeast Asia, so it would be necessary for the governments to underwrite the inauguration of the service, at least initially.

The seakeeping qualities of many inshore lifeboats, such as the Atlantic 75 inshore lifeboat, have been tested many times in rescues in the most violent weather conditions that occur in this part of the North Sea. They would be most adequate in Southeast Asia.



ABOUT THE AUTHOR

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