

How safe is recreational boating in the UK?

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INTRODUCTION

With more and more people in the UK taking up recreational boating of some sort, the ability of the authorities and those involved with safety around our coasts to cope with the numbers of incidents is increasingly being questioned. It is generally felt that the activity is safe, and very often that opinion, and it is only an opinion, can depend on whether your viewpoint is that of an enforcer and legislator, or participant. Those involved in rescue may have a different view though that may be of the participant, not the activity.

Another question that arises is just what is meant by safety? Is safety (or lack of) measured simply by the numbers of lives lost, or is there any relation between the numbers of lives lost and the amount of boating, and how is that to be measured? At some stage, as part of the thought processes, an opinion might need to be formed about what an unacceptable level of risk is, perhaps compared with other activities.

BACKGROUND

Geography and Demography

The UK is a small country, geographically speaking, and while situated in the more northerly latitudes (between 50 and 60 degrees north) it enjoys a mild climate compared with other countries at the same latitudes. This is due to warm sea temperatures being brought North East diagonally across the Atlantic Ocean on the Gulf Stream. The south, and particular South West enjoys mild winters and generally warm summers. However normal weather patterns bring a series of depression tracking them West – East, which can bring unexpectedly severe amounts of wind and rain, often quite quickly. However the climate is generally conducive to all types of water based activity.

The economy of the UK is sufficiently buoyant for there to be significant amounts of disposable income for a relatively expensive pastime like boating to be taken up by large numbers of the population. The UK is a maritime nation, through trade and fishing.

Boating in the UK

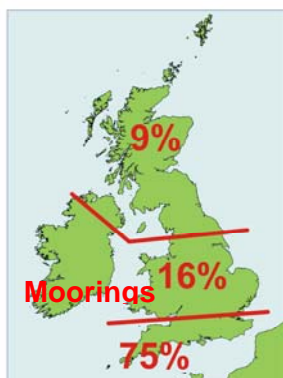


Figure 1
Moorings distribution in the UK

To give an idea of the scale of boating in the UK, the following is relevant. It is generally accepted that there are about 450,000 boats in the UK¹; and about 3½ million people go to sea for leisure², this is about five percent of the population. The length of the UK coastline is around 7,760 miles or 12,500 km, which is long compared to the coastline of Italy (7,600 km), Spain (4964 km) or France (3427 km). The reason is that the UK is a nation encompassing more than 1,000 islands.

The UK mainland geography is such that it is generally accepted that along with the climatic north-south divide there is also a population disproportionality, with the South East and South being much more densely populated than more northerly areas; there is also considered to be a better economic wellbeing in the south.

Small wonder then, that this imbalance is reflected in the popularity boating in the South, with nearly three quarters of the boats in the UK being based in something like 10% of the coastline, or 25% if outlying islands are ignored (*figure1*).

Recreational boating covers the use of all kinds of craft, not just traditional motorboats and yachts but also more portable types of craft like windsurfers, jetskis, sports boats and other craft that may be trailed or carried on the roof of a car.

Paucity of consistent data

Whilst there are plenty of regulations concerning the operation of commercial craft, those that are used for leisure are subject to no specific regulations or licensing apart from the obligation to follow international rules, particularly those concerning collision avoidance, an obligation that is faint in its adherence. A result of this is that there is no clearly defined responsibility for those who use the sea for leisure. This means there is no definitive information about the use of the sea except that which has been assembled for other specific purposes. The information that is available is that which has come from research conducted by parties who are interested in the results for their own ends and there is no consolidated information about the scope and scale of boating in the UK. Only recently has research been commissioned about participation, whilst this is welcome it is not the full picture. Not unnaturally the British Marine Federation (BMF) has assembled some information, the Maritime and Coastguard Agency (MCA) itself endeavours to find out as much as it can, and many other ad hoc studies have been done. There is no one definitive set of statistics concerning the numbers of participants in marine boating, or indeed the numbers of craft disposed around the coasts and people's homes.

Safety issues can accumulate from the amateur use of water in a latently hostile environment; there are other safety issues that directly relate to the high density of use, particularly in popular areas, and the different ways in which different types of water users are seeking their enjoyment. This is never more evident than in areas close to the shore in holiday areas where high-speed craft may conflict with low speed craft and even swimmers (*figure 2*).



Figure 2 - Conflict at the interface

Unlike many nations with highly developed recreational boating environments there is no statutory obligation for any boat owner or user of any craft to have undergone any formal training; nor indeed is there a requirement for craft to be subject of any form of registration process, and even insurance is an option, though one that is self-regulating, as most marinas and launch sites demand evidence of insurance.

THE REGULATORY ENVIRONMENT

In the UK there is no clearly defined responsibility for the safety of leisure users around our coasts. The MCA has statutory duties including SOLAS (an international convention on Safety Of Life At Sea), commercial vessel inspection and survey, Search and Rescue (SAR) response and coordination, and the Merchant Shipping Act, but none for recreational craft. It is responsible throughout the UK for implementing the Government's maritime safety policy. That includes co-ordinating search and rescue at sea, and checking that ships meet UK and international safety rules. They endeavour to prevent the loss of lives at the coast and at sea, to ensure that ships are safe, and to prevent coastal pollution.

UNCLOS
United Nations Convention on the Law of the Sea (UNCLOS) 1983
"Every coastal State shall promote the establishment, operation and maintenance of an adequate and effective search and rescue service regarding safety on and over the sea and, where circumstances so require, by way of mutual regional arrangements co-operate with neighbouring States for this purpose."

The UK is a signatory both to SOLAS and the newer UNCLOS, but it relies on a voluntary educational process and peer pressure from other sea users for the voluntary adoption of safe practices. At the other

end of the use of spectrum, that is once things have gone wrong and a search and rescue operation is needed, then the UK is very well-placed indeed. The MCA have a network of Maritime Rescue Co-ordination centres (MRCCs), a highly efficient and very effective communications network, backed up by land-based rescue units and access to strategically placed helicopters and deep water tugs. However the delivery of marine search and rescue is by independent organisations, the most prominent which is the RNLI, which is a charitable organisation.

THE RNLI – THE UK’s MAJOR MARITIME RESCUE SERVICE

The RNLI was founded in 1824, and since then has saved 137,745 lives. Currently the average is around 300 per year. Increasingly its fleet of 345 lifeboats operating from 232 stations in the UK and the Republic of Ireland are finding themselves tending to casualties who are not professional mariners. This is a marked difference from, say, 100 years ago when almost all services would have been to the aid of professional seamen (*figure 3*).

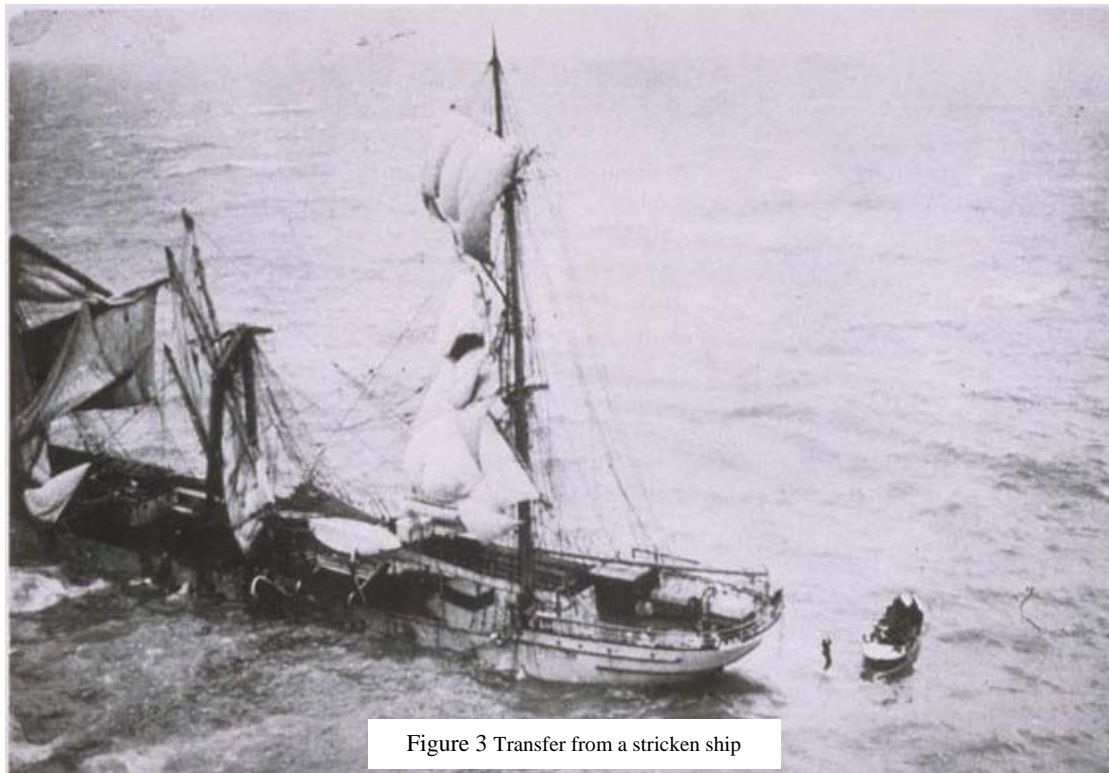


Figure 3 Transfer from a stricken ship

Today there are increasing numbers of services close inshore to aid those who have gone to the beach for relaxation. This has led to the RNLI becoming increasingly involved in providing the lifeguarding service in the UK. It is fortunate that developments including communications, the speed and reliability of lifeboats and training of the crews has meant that incidents that would probably have resulted in fatalities now have happier outcomes.

THE COST OF PROVIDING A RESCUE SERVICE

Of course providing a highly developed and extremely sophisticated rescue service does not come free - at least not to those engaged in the activity. It is indeed an unusual set of circumstances for a charity, albeit a multi-million pound charity, to be providing a search and rescue service required under UNCLOS on behalf of the country, and for government to be contributing not a single penny. However the successful fundraising of the RNLI has ensured that throughout its 183-year history it has been sufficiently funded for that not to become an issue. It is able to generate income by calling on the public for support, and it is very fact that the government has no influence that helps that fundraising.

FINANCES

Costs

It is easy to speculate what would happen to the UK lifeboat service were government to be involved. Not unnaturally there would be a determination to analyse the loss of lives to the UK economy, and balance that against the cost of providing a lifeboat service. There can be no doubt is that the emphasis would be on providing a minimal service, rather than the one that is deemed necessary at the moment.

Let us consider the financial equations.

Every year the RNLI spends in the order of £120 million, which comes to it through donations from the public. Furthermore the search and rescue part of the MCA's budget is in the order of £60 million, which comes from taxes. In addition the Ministry of Defence and other rescue providers will probably spend a further £20 million, and this money comes from taxes, and also public donations.

It is fair to say, therefore, that the total cost of providing search and rescue around the coasts and UK is about £200 million, to which the Government contribute less than a third. That is the cost.

Benefits

It is well known that a citizen's death is a loss to the country's economy. This is based on the anticipated contribution to the wealth of the nation that the citizen would have made had he continued in a productive life. Is not unexpected there are several views about the size of the figure but at least there is consistency about the ballpark figure which I will use here. Currently the figure used in the UK is £1.3 million for a life lost, and that for a serious injury is £0.8m. So by reducing deaths and serious injury it is possible to postulate that there are financial benefits to the country in terms of income loss avoided.

The RNLI's records³ show that roughly 300 lives are saved, according to its strict criteria, every year. At £1.3 million that is roughly £400 million worth of benefit to the UK economy. It is impossible to be exact, but by making pro rata assumptions about the ratio of lives lost, lives saved, and launches it is possible to argue that around 1000 serious injuries are avoided, and that then results in a further £800 million benefit. That total of these two is around £1.2 billion.

Given that the cost previously described is around 200 million then the benefit to the UK economy of the activities of the RNLI and others is a staggering £1 billion, at least.

A 'health warning' is appropriate here. One of the problems faced as a result of the lack of formal structure to the recreational environment is that there is no one central source of information. The RNLI collects its figures, as does the MCA and indeed so do other organisations, but there is no centralised authoritative source of information. An attempt has been made to do this through an initiative called SEAREM, first introduced by the RNLI. It is likely this will migrate to the newly formed National Water Safety Forum (NWSF). To give an idea of the sort of problem that might be met, an incident close inshore might result in the casualty being brought ashore by the lifeboat, who is then taken to hospital where he later dies. As far as the National Health Service is concerned that is a death, and it might be recorded as 'marine related', but to be RNLI and the MCA it is recorded as a life saved.

SAFETY ATTITUDES OF RECREATIONAL BOATERS

For an activity to be regarded as safe there are two constituent elements that need to be satisfied. Firstly those engaged in the activity need to be aware of the safety considerations of what they do and when they do it; and then, for the occasions when things go wrong there needs to be an effective fall back, with the Search and Rescue safety net being a last resort.

There are many activities that are known to contain an element of risk and those that engage in them are fully aware of this and undergo the necessary preparations, training and equipment maintenance to ensure they continue in safety. One only has to consider hang gliding, diving, rock climbing or even aspects of motorsport to realise that the participants have set out to enjoy their recreation knowing the dangers and the risks, and are comfortable that they have done all they can to minimise their own exposure to danger and the likelihood of their actions putting other people into danger also.

Boating is not considered in this light at all, and for a number of reasons. Firstly, and for the majority, it is normally only undertaken in benign summer conditions. Secondly there is a lack of knowledge about the sea that ought to have been transmitted during the educational process and generally has not. Add to this the naive assumption that boating does not need any formal training or knowledge, especially among those who take the sea in small powered craft, and you have a complacency that is truly misplaced. The professional seamen, whatever his calling, is aware that the sea has been killing people for thousands of years, and sees no reason why it should stop doing so. He therefore conducted his activities with this implied threat always at the back of his mind, and still does.

Not so our recreational boater. He sets off with no knowledge that he is actually entering a potentially hostile environment. It is no surprise therefore that he is ill-prepared for deteriorating conditions, mechanical failure or misjudged tides. There is a massive communication difficulty to be addressed here.

The UK leisure boating environment is unregulated, and there is no formal structure requiring training and safety education. In its place it falls to the Royal Yachting Association (RYA) to provide a suite of learning opportunities for anybody who wishes to learn about and understand boating. The training is very effective, however they find it difficult to reach everybody that goes boating, and sadly huge numbers boaters of all sorts have never heard of the RYA, let alone done any training. These people are vulnerable and pose a threat to themselves and others.

However deaths in the recreational boating sector are actually quite small compared with the large number participants, a picture that at first sight might seem to be one to be comfortable with. I am certain that this is not the case, and that the relatively small incident ratio is a function, not of safe people conducting a safe activity safely, but of a highly developed and highly effective communications and response facility. I contend furthermore that recreational boating carries an element of risk, and is therefore a risk-based activity. It is only perceived as being safe because of the unsung and unpublicised rescues that take place on a daily basis, and worse, the thousands of near misses that are never known about.

THE INCREASE IN THE USE OF THE SEA FOR RECREATION

It might be helpful at this stage to understand the notable increase in leisure boating activity in the UK. Traditionally the only way to go to sea for recreation was to be wealthy enough to own a large yacht, either motor or sail. The picture is different in our modern times. Of course one can still be wealthy and own a large motor yacht or sailing yacht, but there are now countless other ways of using the sea for fun. Many of the new activities do not involve the idea that the boat has to have a permanent berth, and many of them use craft that can either be trailed behind the car, or carried on its roof. Many activities are adrenaline producing, and enjoyed largely by young males. The table below shows the range of boating that can be done (*table 1*).

Table 1 - Ways to go boating

Ways to use the sea for leisure			
Large Sailing Boat	Windsurfing	Surf Kayaking	Diving
Small Sailing Boat	Sea Angling	Rowing	Kite Surfing
Large Powered boat	Kayaking	PWC use	Wakeboarding
Small Powered boat	Surfing	Water Ski-ing	Towed inflatables

The next factor is a geographical one. Apart from the bias towards the south in terms of activity and population, the UK is a small country where nowhere is more than 72 miles. (120 km) from the coast. Modern road infrastructure and faster vehicles means that, arguably, nobody is further than an hour from the sea.

Modern boats, of whatever type, are cheaper in real terms than ever before. The size and demand of the market, modern production techniques and materials, and new industry in countries with cheaper labour rates means that whatever the type of boating interest, it is relatively affordable.

Boating is also seen as an aspirational activity. This is actively supported by those marketing boats, and boat ownership is seen as a social indicator of somebody who is sufficiently well established to be able to indulge in expensive toys or recreation .

People these days also have more leisure time, and our culture is to derive maximum benefit from it.

So, you have more people doing more things more cheaply more often and more easily and for longer, so it is only natural that the outcome is an exponential increase in use.

This ‘explosion’ comes at a cost though. When the only people who went to sea for fun were a relatively small and rather exclusive group, there was peer pressure and self pride that led to them taking their recreation seriously. They were proud of their amateur boating and made sure that they were thoroughly prepared and thoroughly understood the environment they were in, and properly prepared for eventualities. When the small group expands so massively there is a natural degradation of the base level of knowledge, on average. Simply summarised it is the lowest common denominator.

THE EVIDENCE

Rescue statistics seem to endorse this concept. Figure 4 shows RNLI rescue statistics for the recent 20 years. Each column represents the number launches to a certain type of craft, this is felt to be an indicator of the number of people in trouble. The groups are broad but the message is clear. Firstly it seems the three groups of craft, that its large motor boats, large sailing boats, and small motorboats get into trouble in significantly greater numbers than the other three groups. This is no surprise, as these groups currently are the greatest number, and are used to a greater extent. It is also clear that there is a distinct trend - upwards.

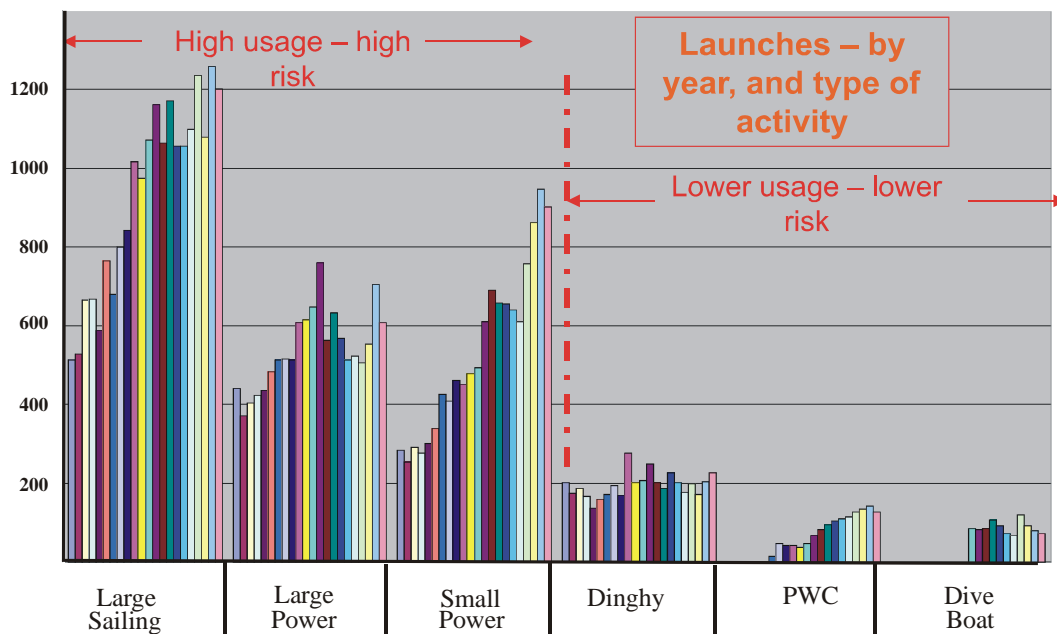


Figure 4 – Lifeboat launches to different classes of craft

From the point of view of safety these launches do not tell the full picture. The next chart (figure 5) shows that whilst launches are going up, lives saved are actually going down. This is a success story,

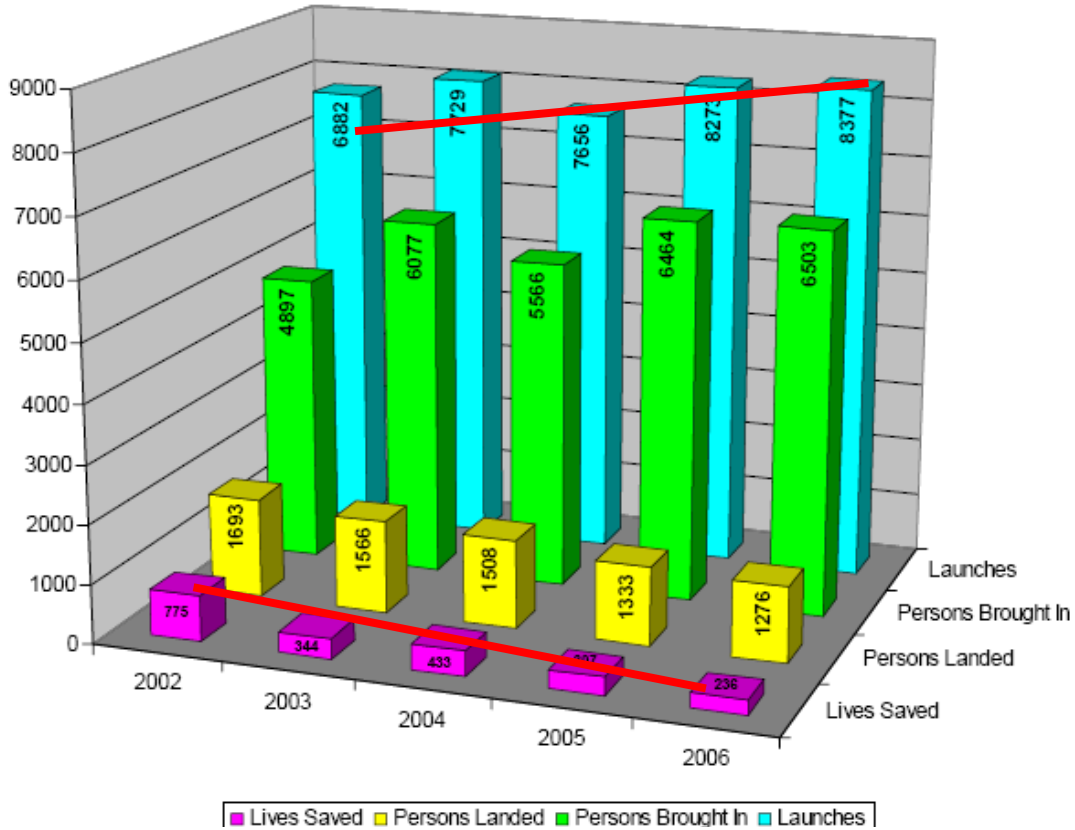


Figure 4 – Lifeboat launches to different classes of craft

for it yet again reinforces the effectiveness of SAR facility. The bottom line is that through higher-speed lifeboats, better design and capability, and better communications, incidents are being resolved before they deteriorate into loss of life or casualty.

Given the lack of coordinated information it is difficult to know what the appropriate response could be, however an analogy with road safety can be stretched to provide an insight.

THE ROAD ANALOGY

Phil Goodwin, Professor of Transport Policy at the Centre for Transport and Society makes the case for not taking action to improve safety⁴. He argues that no action is necessary, as the trends will solve the problem. He postulates a simple equation for roads in that the number of fatal accidents equals the amount of traffic multiplied by the accident rate in terms of eventualities vehicle mile.

$$(\text{Amount of traffic}) \times (\text{Accident rate}) = (\text{Number of fatal accidents})$$

where the accident rate is expressed in fatalities per vehicle mile

Figure 6 shows a graphical representation of the equation, where deaths per mile are going down and the volume of traffic is going up. It is a matter of mathematical fact that these two multiplied together produce a graph that rises and then falls. And this, the number of fatal accidents (the thing of most concern to the public), is the third graph.

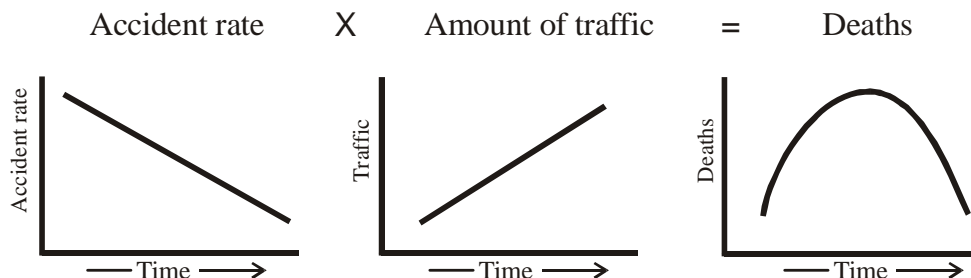


Figure 6 - The road safety equation

Armed with this, his contention is based on vehicle research done in Japan where they had paid early attention to the issues that were confronting UK traffic safety authorities in the Sixties. The position on our roads now is such that the volume is still going up, the deaths per mile going down, and the evidence is that the fatality rate is on the decline.

In 1965 the graphs (*fig 7*) may have shown....

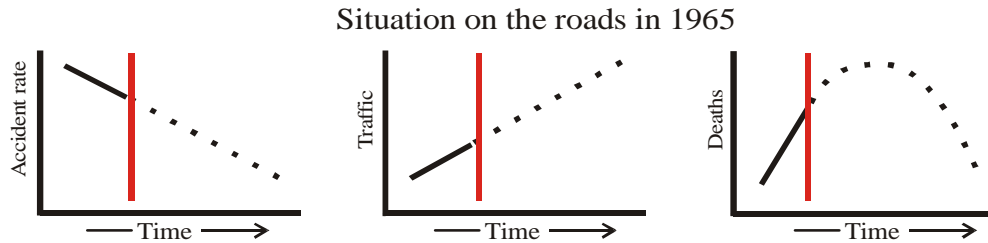


Figure 7 - The road safety equation - 1965

...except that they would only have been aware of the solid part of the curves. Volume was going up and deaths/mile going down, of course, but at that time fatalities were on the rise. The traffic planners could be forgiven for thinking that urgent remedies were required, and indeed many were introduced, but had they know where they were on Professor Goodwin's graph they may have taken comfort knowing that things were inevitably going to get better, if things continued as they were, for this is the situation on our roads now (*fig 8*)...

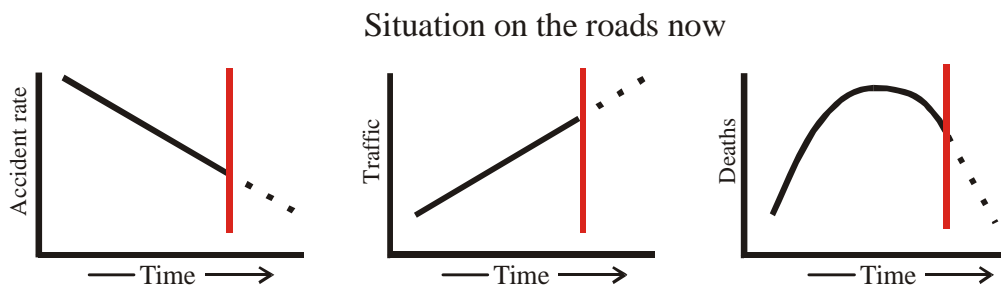


Figure 8 - The road safety equation - now

I believe that there is parallel with these statistics, and our intuition about what is going on in recreational boating. Certainly the volume is going up and incidents per participant are going down (the explosion in boating). What is unknown is where we are on the fatality graph. I don't know if we are on the upward slope, or somewhere near the top. I do know that we are not on the downward curve.

It is obviously imperative that some kind of evaluation of the incidents and their causes needs to be undertaken, and the MCA has started such a programme this year. Sadly the evidence is swelling. The Marine Accident Investigation Bureau features more and more reports on leisure boating incidents, and are becoming increasingly vocal in their calls for action.

THE MARINE SAFETY 'ESTABLISHMENT'

Without government initiative, the Marine safety "establishment" is beginning to recognise that a self generated safety structure will provide the backdrop to a better Marine safety environment amongst leisure boaters. Once again, but not surprisingly, the RNLI has played a key part in this development. It has an enviable position, in that it is regarded as an honest broker having no axe to grind, except the safety of sea users. This benign authority allows it to be able to influence, in some way or other, positive developments.

Government does have a direct link, through a body known as the National Water Safety Forum. This forum consists of the chairs of six advisory groups, and is hosted by the Royal Society for the Prevention of Accidents (RoSPA). The six advisory groups are Sea Safety, Beach Safety, Watersports Safety, Inland Water Safety, Swimming Pool Safety, Water Safety at Home and also an Information

group concerned with gathering statistical evidence. Each of these advisory groups provides a link from the activity, through the forum and onto government through the Inter-Departmental Government Group. Water safety issues cut across many Government departments and for the first time a contact group involving departments with water safety interests has been established comprising representatives from ten departments. There is therefore the ability for Government to raise issues to be considered by the forum and the group responsible; similarly the Forum can raise issues, brought to it by the Groups, with Government (*figure 9*).

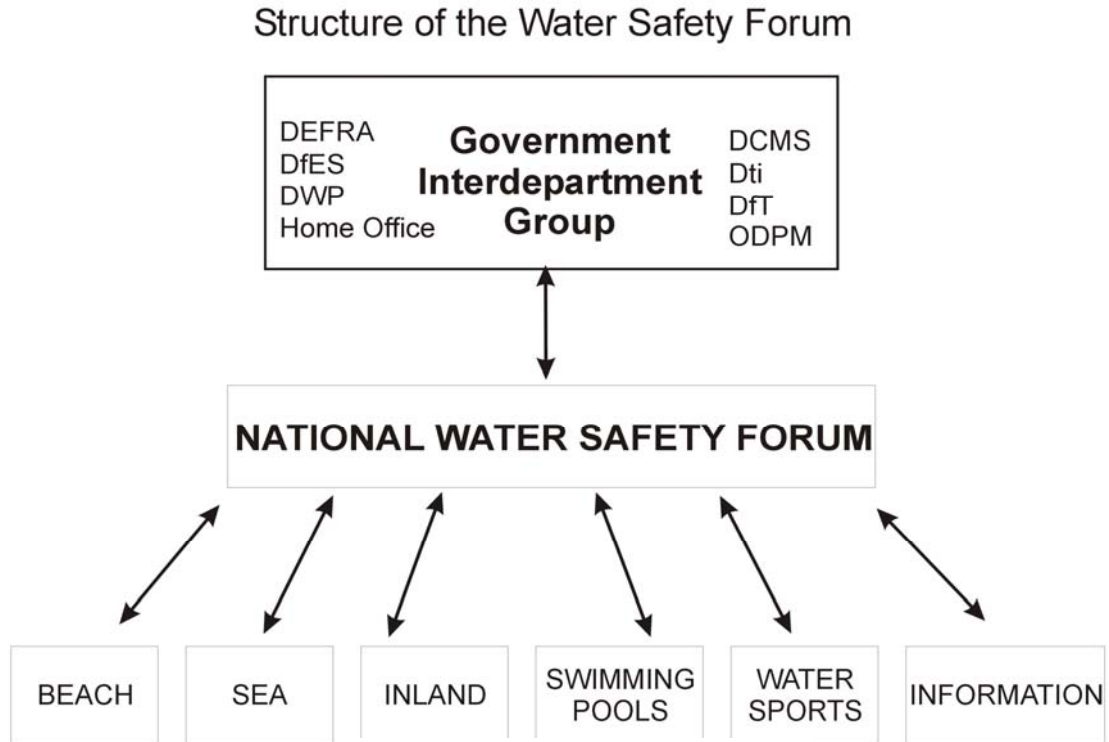


Figure 9
Structure of the National Water Safety Forum

There are several other groups who meet to consider and act on sea safety issues, with many cross-organisational links (*figure 10*).

In an international sense, and where sufficient data exists to allow comparisons, the UK does not seem

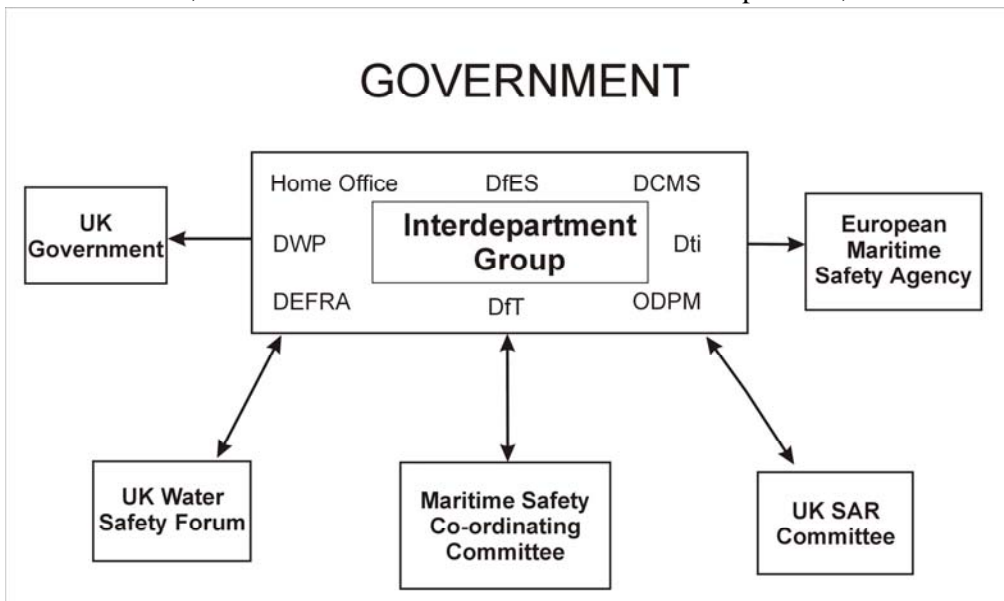


Figure 10
The UK Sea Safety 'establishment'

to be a place where boating is unduly unsafe. Figure 11 shows that for those countries where the

information can be matched, the UK features the best. Also research conducted by the Pleasure Boat Safety Advisory Group on behalf of the New Zealand Government⁵ concluded that in terms of accidents per boating unit, the UK was one of the safest in the world. Paradoxically this particular research was designed to investigate the impact of a regulated boating environment, and it is surprising to many that the most unregulated country was in fact the safest.

EDUCATION vs LEGISLATION

Whatever the reasons, whatever the background, whatever the justification, it seems that the option to "take the foot off the pedal" is not open to the UK. As boating increases and knowledge increases, even though the SAR facility is good, people lose their lives. I have argued that the response facility is more than adequate, so we are driven to look at other opportunities to make boating safer.

There is, of course, the view that some kind of compulsory training, coupled possibly with boat registration or other legal structure led by government will produce a safe environment. This view is held contrary to the New Zealand report and may well result in an attempt to introduce legislation that may be intended to make boating safer.

Country/State	Fatalities/ 100,000 Vessels
Denmark (5m)	24.6
Argentina (34m)	9.0
New Zealand (3.7m)	8.7
Canada (30m)	7.8
Singapore (3m)	7.2
Australia	7.2
USA - Average	6.0
Sweden (8.7m)	3.1
Germany (78m)	2.5
Israel (6m)	2.5
United Kingdom (56m)	1.5

Source: Ocean Projects Ltd 1998

Figure 11
Fatalities per 1000 boats

The difficulty that will be met is that the UK has almost no ability, and certainly no structure, to be able to police such legislation. As the saying goes – "No law is better than a bad law."

RNLI PREVENTION

Another saying is that 'prevention is better than cure', and this is where an impact can be made, and indeed, *is* being made. The RNLI has been delivering a programme aimed at bringing safety information to recreational boaters for ten years. It does this in pursuit of its Charitable Objective to save life at sea, but by changing attitudes and behaviours rather than by dealing with physical casualties.

The overriding principle is one of communication and to be able to convey the importance of safety awareness without adopting a hectoring tone or a 'holier than thou' type of approach. There are several strands of this communication initiative, which is managed and coordinated by the head office in Poole but delivered around the coasts through Sea Safety Officers associated with lifeboat stations.

Wherever boaters assemble, these teams of volunteers try to reach them in order to deliver a suite of simple safety messages. These are

- o Wear a lifejacket
- o Check the weather and tides
- o Have some means of calling for help
- o Check your engine and fuel
- o Tell someone where you are going and when you will be back.

All other messages can be woven into the five basic messages, for example the 'wear a lifejacket' message can be expanded into lifejacket maintenance, or choosing a child's lifejacket.

The delivery avenues employed are

- o A fleet of roadshows (*figure 12*)
- o Safety days at marinas
- o Talks in yacht clubs
- o Flare, life raft, and lifejacket demonstrations
- o Lifejacket clinics
- o Presence at Major and minor boat shows
- o Presence at Boat jumbles
- o Presence at Regattas
- o Presence at Major boating events.
- o Boat Safety Equipment checks (SEA Check) (*figures 13a & 13b*)



Figure 12
RNLI Sea Safety Roadshow



Figure 13a
RNLI SEA Check



Figure 13b
RNLI SEA Check

Additionally paid-for advertising and free articles in the National boating press, and the use of PR are used wherever the prioritised target audiences are felt to be reachable.

The RNLI also produces a series of leaflets, the most notable of which is the Complete Guide to Sea Safety, an award-winning booklet containing top-level safety information supported by a CD-ROM which goes into some depths about safety issues with videos, graphics, animations, and self test tutorials. Much of this work also features on the sea safety website within the RNLI site.

Unlike the hard statistics that are evidenced by the records of the RNLI, it is much harder to prove that preventative activity has resulted in a life saved. It is not possible to prove a negative result. However

in order to justify to the public, who have so generously given to the RNLI, that our activities are in line with what they support, we conduct research that measures changes in attitudes and behaviours, which it is possible to link directly to a life saved.

Recent research conducted by the University of Plymouth⁶ has shown that 68% of the boating population have received RNLI Sea Safety Information; and 48% of those believed that it has changed their behaviour at sea. The implication is that one-third of all boaters have voluntarily changed their behaviour as a result of an RNLI intervention.

The sea safety department sets itself KPIs by which it measures the progress it is making in visible quantifiable changes in behaviour for example (*figure 14*) :

Table 2 - RNLI Sea Safety KPIs

KPI	Benchmark	Target
The percentage of the key target audiences claiming that safety is a top priority before putting to sea	86	90 in 5 years
The percentage of key target audiences claiming to always follow all of the five key safety activities before putting to sea	32	35
Percentage of key target audiences aware of receiving RNLI Sea Safety activity	24	30
Percentage of key target audiences who safety behaviour has changed as a result of receiving RNLI Sea Safety information	41	45

There is no doubt that in 10 short years RNLI Sea Safety has made a major contribution to boating safety in the UK. Prevention is definitely better than cure.

SO IS UK BOATING SAFE BECAUSE OF THE SAFETY NET?

I believe that boating in the UK is a low-risk activity when considered alongside the level of activity and the number of deaths or injuries. However I believe there is substantial room for improvement, and if the attitudes and behaviour of those who use the sea for recreation could be changed, and that they could pay more attention to their own safety, then things would be better still. I also believe that the changes that are required can be achieved through training, by promoting safety consciousness and awareness, and by being better prepared for the possible event that could prove to be disastrous.

However, and in conclusion, the risk of death is only low due to the efficiency of the alerting and response mechanism; and that if it wasn't for the effective SAR capability, and in particular the RNLI lifeboat and life guard provision, the picture would not look anywhere near as comfortable. I further believe that effective prevention does stop accidents, as it improves the alerting procedure and buys the time for casualties to survive until the rescue is effected. There is a powerful and effective safety net in place.

A THOUGHT...

The 'human cannonball' is a popular and thrilling form of entertainment. Doubtless he has taken all the safety precautions he needs, is subject to much official scrutiny and checking, has all the correct equipment properly maintained, and has done as much training and practice as he needs. He also has a safety net. His activity is, as far as reasonably practicable, safe.

How safe would he be if the safety net were not present?

TAKE HOME MESSAGES

- o Effective SAR and prevention programmes benefit national economies.
- o A highly structured and effective SAR capability might lead complacency amongst boaters.
- o The more people who go boating, the lower the base level of appropriate knowledge.
- o Even if education is preferred to legislation, it is not likely that all boaters will receive training.
- o Given sufficient funding a lifeboat service has a significant role to play in the education process.
- o The prevention model developed by the RNLI is welcomed by the boating community.
- o Statistics recording deaths may not necessarily reflect the safety of the activity.
- o As boating gets more popular it is more likely that boaters will not recognise the dangers of the sea.
- o A regulated and legislated boating environment is not necessarily the safest.

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