The considerations of maritime crime in the planning, design and operations of a marina

T. Goodhead, N. Kasic
Maritime Division, Southampton Institute, Southampton
SO3 9ZL, UK

Abstract

This paper reviews the scale of marina crime in Britain. It provides an analysis of the types of crime being committed and provides guidance for marina operators in the fight against marina crime.

1 Background

The development of marinas over the last thirty years has led to new forms of criminal activity. Pools of yachting wealth both in terms of boats and equipment have proved attractive to both thieves and vandals. The rapid development of the modern plastic boat has been supplemented by a rapid development in the technology of boating equipment, much of this equipment being of high value and relatively portable. There appears to be three types of criminal activity in marinas: vandalism, opportunism and calculated theft, all of which create their own specific problems for the marina manager.

Of the three types of crime taking place in marinas vandalism is possibly the easiest to prevent. Using a system of perimeter fencing and control points, visitors to a marina can be restricted. Where a marina is being used as a boat park, this form of security whilst costly, is relatively easy to introduce. However, where the marina has a mixed development including a tourist feature attracting day visitors security and commerce may conflict. Vandalism is at its greatest in the early evening in marinas and may be associated with alcohol, given that this problem peaks at certain times of the day and year, security can be adjusted accordingly.

Opportunist crime is much more difficult to combat in a marina environment.
Responsibility for providing a deterrent for this form of criminal activity may be a collective one resting with boat owners, marina operators, yacht clubs, the public and the police. The prime responsibility must rest with the owner of the boat to prevent an opportunity from arising. Whilst the modern boat is a relatively lightweight structure compared to a house some action can be taken to secure it and individual items. The difficulty for the boat owner is deciding to what lengths to go in securing the boat and its equipment against an opportunist thief as security comes at a price. This will be discussed at greater length later in this paper.

Calculated theft in a marina environment is perhaps the main issue that should concern the marina operator. The marina operator can indemnify by issuing a contract with the boat owner that places all the liability for loss on the owner of the boat and this is indeed the common practice in the same way as a car park operator accepts no responsibility for loss or damage of cars by third parties whilst cars are in the car park. Commercially for the marina operator to take no responsibility for security measure may be an extremely bad decision as the boat owners may move their boats to a more secure marina if the operator does not provide security equipment and services. In reality security must be a partnership between the owner and the operator.

Security in a marina must be part of the mental attitude of all users and managers of marinas. The provision of security measures can be regarded facet of the total quality management of a marina. One practical problem is that security measures may be unsightly, ring fencing a marina may give a 'Colditz' appearance and be detrimental to the overall image of the facility. At the design stage security can be built in to the marina development, for example bridge head keys providing a drawbridge and moat effect can be much more aesthetically pleasing. At the design stage of a marina three types of security should be considered observation, restriction and alarms.

Observation of a marina is critical in the combat against crime. This must involve all users of the marina as vigilance is critical in the combat against crime. This vigilance may include at one end of the technology scale close circuit television monitors and at the other end neighbourhood watch schemes where boat owners band together to report suspicious activity to the marina operator and the police. Theft in marinas tends to be a day time activity. A confident thief may easily fool a security guard by dressing in an appropriate manner and acting with confidence, however the thief if unlikely to fool a neighbouring boat owner who knows the vessel and her owners well. Vigilance is a collective responsibility. The marina manager is in an ideal situation to manipulate self help groups for the collective good of the marina and link the scheme with surrounding schemes.

Restriction of access can be operated by boat owner and marina operator alike. The boat owner can fit padlocks and disabling devices. One train of thought
Marina recommends the fitting of high quality padlocks to keep the thief out of the yacht, another train of thought suggests fitting very weak padlocks to deter the opportunist but to reduce the damage to the yacht if a determined professional thief should strike. In any event the very least that the boat owner can do is put out of view very expensive equipment but the presence of aerials and antennae may give away the presence of valuable equipment. The marina operator can restrict access to the facility for non boat owners and provide security zoning using swipe cards and keypad locks. When the boat is afloat it is relatively easy to provide security but is perhaps during the winter months when the boats are out on hard standing under tarpaulins that the marina operator faces the greatest problems. Maintenance workers, fitters and the like engaged by the owners or even DIY owners themselves provide a chaotic scene in the off season and it is often extremely difficult to discern who should be in a marina and who should not. There are examples of brazen thieves driving into marinas in white overalls and vans, promptly dismantling boats and driving off with complete engines undetected. The marina operator faces a difficult problem in that providing check points will cure this problem but severely damage the atmosphere and feeling of the marina.

The fitting of alarms by the boat owner can act as a significant deterrent. The traditional car alarm fitted to a boat with contact breakers and siren can be very effective but unfortunately for a boat in an estuary response time may be so slow as to render it useless as by the time help arrives the thieves have left with their bounty. In the same way that there are so many false alarms with car alarms that no one takes much notice this also can occur with boat alarms. Sophisticated alarms such as the 'Harbourguard' system do have a great role to play as a deterrent. These alarms link to a central base station and allow for 2,000 million boats to operate on a common network. Using VHF signals this system can alert the marina operator of intruders, flooding, fire emergency and vessel departure and arrival. This system has to operate in partnership with the marina operator. These systems can be supplemented or replaced by disabling devices in engines and marine equipment which render them useless.

2 Is marina crime a problem?

In 1992 the Police Records for Hampshire, England show thefts of boats and equipment were valued at £1,132,400 and of that £173,885 were recovered. Based against the total value of boats and associated equipment in the County of Hampshire, which includes the Solent the most densely boat populated waters in the UK, this does seem a remarkably low figure. The question must be asked at this point; is marina crime really a major problem in the UK? This is extremely difficult to answer as national records for boat crime in the UK do not exist, regional records are kept by police forces but not in a form that could be readily collated, (a Police national Computer was set up in November 1994 with a new category for boats stolen and so information may be more readily available.
in the future). If it is accepted that these losses are only a small fraction, which is less than one percent, of the total value of all boats and boating equipment then these losses should be reflected in insurance premiums. In the UK this is reflected in premiums which may be as low as 0.8%. With very low premiums the loss of a no claims bonus does not really have a very large impact on the policy holder and so it is likely that the boat owner will rely on the pay outs from insurance companies rather than take preventative and security measures. In European countries where premiums are much higher the policy holder may take security much more seriously. However, there are some significant victims of marina crime and these are not obvious at first sight. If a boat is stolen then assuming that the owner has a reputable insurance company he will be recompensed. The thief selling the boat on if undiscovered will also be 'recompensed'. The looser is the person that buys a second hand boat which has been stolen only to find that it is stolen and then it is repossessed by the insurance company. This person faces a financial disaster of perhaps tens of thousands of pounds which is not recoverable on the insurance policy of the boat. As well as the individual who may get seriously financially hurt by maritime crime it does seem to be an escalating problem that is unlikely to go away unless the marina industry and boat owners put up a common fight. The scale of marina/boat crime in the UK we estimate to be approximately £20 million a year by simply multiplying the Hampshire statistics up.

If it is accepted that the Hampshire statistics can give a rough guide to the pattern of crime nationally in the UK then the following statistics illustrate that it is the theft of equipment rather than boats that is the major problem facing our estuaries and marinas.

1992 Hampshire

<table>
<thead>
<tr>
<th></th>
<th>Stolen</th>
<th>Recovered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boats</td>
<td>£ 500,000</td>
<td>£ 92,785</td>
</tr>
<tr>
<td>Outboards</td>
<td>£ 352,400</td>
<td>£ 47,000</td>
</tr>
<tr>
<td>From Boats</td>
<td>£ 280,000</td>
<td>£ 34,100</td>
</tr>
<tr>
<td>Total</td>
<td>£1,132,400</td>
<td>£173,885</td>
</tr>
</tbody>
</table>

It can be seen from these statistics that the value of equipment stolen exceeds the value of the boats stolen. This equipment once stolen is extremely difficult to trace. In the UK there are many potential outlets for stolen marine equipment ranging from newspaper advertisements to boat jumbles. It is extremely difficult to verify ownership in a country that does not have a formal registration process for registration of boats. One could be introduced but the cost of introducing such a scheme may well outweigh the cost of goods stolen. In recent years a number
of companies have introduced electronic tagging and security marking systems. With such low insurance premiums it is unlikely that they will ever be adopted on a national scale by all boat owners but they obviously have a market for people wishing to mark expensive equipment. This type of technology is being developed by commercial companies some of whom predict star wars technology with alarm systems being linked to national and international communications networks all as an integrated system. Looking at the level of maritime crime at present it is questionable whether the costs of this technology are outweighed by the benefits.

### 3 The role of the Marina Operator

The marina operator can contribute a great deal to the security of clients and their yachts. The following criteria should be considered in the design of all marinas. Implementation will be a function of location and the value of the yachts in the marina. High value yachts may have owners who are prepared to pay for high technology systems it is unlikely that they will be adopted by owners of low value yachts and equipment. Listed below is a series of bullet points that should be considered by the developer or manager of any marina both at the design and operational stages.

**Design**

Marinas should be designed with specific security zones incorporated from the outset.

These should include:

- Bridgehead security points onto the pontoons.
- Sightlines from the central harbour office so that vigilance can be maintained by harbour officers.
- CCTV should monitor blind spots in these sight lines.
- A control point at the entrance to the marina should be manned by security personnel or swipe card machines.
- Tourists/Visitors should be managed in terms of footpaths and signposts so they have a view of the yachts but no access to the pontoons.
- Lighting up of areas.
- Lock up facilities for moveable electronics/equipment.
- To enable the monitoring of visiting workmen/vehicles a bottleneck to control the exit/entrance should be constructed.

**Intelligence**

- Link with local business groups to promote crime awareness and gather information on patterns of crime.
- Develop good relations with police marine units and crime prevention officers who will offer local knowledge.
Marina

- All criminal events should be logged to define the weak spots.

Observation
- Self help groups should be encouraged within the marina, boat owners should be encouraged to take collective responsibility. The marina manager needs to establish a neighbourhood watch type of scheme.

- Join with neighbouring sites to give a collective response, otherwise criminals will simply be displaced to neighbours.

Alarms
- Marina operators need to establish a VHF base station for alarms and provide a monitoring service for the system chosen.

- A response to alarms going off needs to be provided in the form of trained security guards, who are experienced with marina activities.

- Mobile patrols over a site add a surprise element and as such timing should be erratic.

Marking
- An etching /marking service should be provided by the marina operator. Signs should be erected to state that all boats and equipment have been security marked on a collective basis. These may include tagging devices.

Disabling devices
- These should be sold at cost to the boat owners.

Prosecution
- Thieves and vandals must be prosecuted no matter how small an offence.

Tie down points
- Strong points must be provided on the hard standing for padlocking equipment.

Security Compounds
- Winter compounds need to be fenced and patrolled.

Insurance
- Develop a package of cheap premiums with a specific broker with specific security devices and serial number lists.
- Ask for serial numbers when issuing contracts for berths.
4 The Future

Attitudes to security must be changed to produce a collective attack by all of those involved in the marine industry internationally. The advent of electronic charts and global positioning fixing systems will eventually lead to tracking systems for stolen luxury yachts which may make them virtually thief proof. The technology of today, using VHF systems, should be encouraged for adoption in marinas. However the most fundamental principal of security, vigilance, is the one thing that can be developed by marina operators with sight lines for observation being introduced at the design stage. Having considered the design of the marina there needs to be a greater amount of discussion between all parties involved in the fight against maritime crime. It is clear that there is a certain amount of apathy against preventing crime and this may be a function of low insurance rates. Further research into the attitudes of boatowners needs to be undertaken.