

HUMAN FACTORS

Ship piracy - out of control?

Tim Power reports on the latest developments with ship piracy and also debunks a few myths

THE SEASON OF GOODWILL that we have just enjoyed appears not to extend to the pirate community.

The International Maritime Bureau's (IMB) piracy report for Christmas Eve includes this incident:

"At 0357 LT at 3.5 miles south of fairway buoy, Cotonou anchorage, Benin.

Five pirates armed with guns and knives boarded a bulk carrier and took watchman and c/e as hostage. They raided master's cabin and stole ship's cash, master's cash and personal belongings and two passports.

"When crew mustered pirates fired warning shots and escaped in a waiting boat. 2/o and bosun sustained gun injuries in their legs and they were sent to hospital. Master reported that almost every day pirates attempted to board."

The IMB Piracy Reporting Centre lists numerous areas as piracy prone: Bangladesh (Chittagong and Mongla), India (Chennai, Cochin), Indonesia (Anambas Island, Balikpapan, Bintan Island, Dumai, Gaspar Straits, Pulau Laut, Samarinda, Jakarta, Malacca Straits), Philippines (Manila), Vietnam (Haiphong, Vung Tau), Gulf of Aden, Somalian Waters, Bonny River,

Conakry, Dakar, Dar Es Salaam, Lagos, Tema, Warri. Brazil (Belem), Colombia (Buena Ventura), Dominican Republic (Rio Haina), Guyana (Georgetown), Jamaica (Kingston), Peru (Callao), Venezuela (Puerto Cabello).

Of these, the area of biggest activity is Indonesia with the total number of piracy attacks higher than the next three worst affected countries (Bangladesh, India and Nigeria) combined.

The IMB reports 344 actual or attempted acts of piracy in Jan-Sep 2003, up from 271 in the equivalent period in 2002. The long-term trend is more difficult to judge but looks to be rising.

The number of piracy incidents every year 1999 to 2002 were 300, 469, 335 and 370. There were 344 incidents in January to September of 2003 alone.

These statistics understate the scale of the problem significantly since they only record reported incidents.

Some masters and shipowners do not report piracy, wishing to avoid delays due to red tape and protracted investigations or increased insurance premiums.

The World Maritime Piracy Report estimated the number of unreported attacks in 1999 to be 130.

Defining piracy

The definition of piracy, which defines it as a crime committed on the high seas, also leads to the problem being underestimated; many incidents occur in coastal waters and do not fall within the definition.

It seems likely that the total number of incidents may be two or three times higher than the number reported by the IMB.

Researchers group incidents of piracy

into three categories: small, large and hijack.

In small-scale incidents, pirates rob the crew or raid the vessel's safe and then leave. Attacks of this type usually take place whilst the vessel is at anchor or in port.

Larger scale incidents typically include thefts from the vessel, its crew and cargo. Cargo that is easily disposed of is usually targeted, such as timber, metals and minerals. Ships' equipment and spare parts are also taken.

The largest incidents of all involve the wholesale hijacking of the vessel and its cargo. The pirates re-paint, re-name, re-flag and re-register the ship and offer its services to a shipper before sailing to an undisclosed destination where they illegally sell and unload the cargo.

Chris Austen, of Maritime and Underwater Security Consultants, has extensive experience of dealing with piracy.

"Small-scale incidents are often carried out by men in desperate poverty. In countries ravaged by war in West Africa, for example, men with no work and no money turn to crime. For those in coastal villages, piracy is an obvious option," he says.

These pirates will steal anything from cash to the shoes and clothing of the crew. "West African pirates are prepared to go 50 miles out to sea in sea-going canoes" says Mr Austen. "Even the theft of a pair of branded trainers will make it worth their while."

In contrast to this sort of petty (but nonetheless highly dangerous) crime is the highly organised theft of vessels and their cargoes.

"These operations are highly sophisticated," says Jayant Abhyankar, deputy director of the IMB.

"Often the ship will be seized initially by a team of mercenaries. Once it is secured and the existing crew removed, a second crew will be brought aboard to sail the ship".

This type of operation is clearly the work of highly organised criminal gangs with a complex international network and support structure.

Hijacking

A hijacking typically involves a mother ship from which to launch the attacks, a supply of automatic weapons, false identity papers for the crew and vessel, fake cargo documents, and a broker network to sell the stolen goods illegally.

"Individual pirates don't have these resources. Hijackings are the work of organized crime rings," says Pottengal Mukundan, director of the IMB.

In some cases, these gangs have colluded with the authorities. In the past, Chinese customs and navy were often been accused of working hand in glove with pirates (although Beijing has now cracked down on piracy), while local politicians in

West Africa have used piracy to boost campaign coffers.

There are growing concerns that piracy might become a weapon of terrorist groups.

In an article in the Financial Times of 19th October 2003, Mansoor Ijaz cited the boarding of a chemical tanker, the Dewi Madrim, as a possible example of terrorists training themselves in the navigation and control of the vessel.

This conjures up images of tankers being used as floating bombs, capable of causing destruction on a massive scale.

According to the IMB's Jayant Abhyankar, the reality was more prosaic.



An electric fence on a ship - will all ships need these in future to be adequately defended against pirates? Photo courtesy Secure Marine

"The motive of the attack was straight forward robbery and theft. Items stolen were US\$9,055 cash, binoculars, camera, communication equipment and 14 cartons of Marlboro cigarettes.

"There is nothing whatsoever to suggest that the pirates were trying to learn to steer at varying speeds. The Master's report in fact suggests that pirates knew how to navigate and handle the engines".

Abhyankar concedes though that the threat of terrorism is always present in any mode of transport and that the potential risk should not be underestimated. Austen agrees.

"During the search of terrorist sites in Afghanistan videotapes of Malaysian counter piracy operations were found. This suggests that terrorists are looking at piracy."

Technology

The development of new, cheaper communication and navigation technology has helped the pirates.

"20 years ago, pirates would have needed a fully-trained radio officer for communications," says Chris Austen.

"Now they can buy cheap long-range radios, radar and GPS devices from a marine chandler. All this makes navigating to and coordinating the interception

of the target vessel much easier for the criminal".

Technology can help the fight back too. A good example is the vessel tracking and alert system ShipLoc. The device consists of a GPS receiver, an Argos transmitter and back-up batteries that can last for several days, making the device independent of ship's power.

In its normal mode, ShipLoc tracks the ship continuously, allowing the owner to view its current location through a web browser. The software also allows the owner to monitor the ship's movements over a period of time.

Crisis mode is initiated by activating the onboard panic button, and reports are immediately sent to the Ship owner, the IMB and the competent authority. The alarm can be activated discreetly at two different locations onboard and the device is small, easy to conceal and therefore difficult to deactivate.

The IMB is also advocating the use of Secure-Ship, an electric fence that sur-

rounds the whole ship and uses a 9,000-volt pulse to deter boarding attempts. When touched, the fence gives the boarder a non-lethal electric shock and sounds the alarm.

Mr Austen suggests other technology-based solutions.

"There are often gaps in a vessel's radar arc that pirates can exploit, particularly looking astern. Plugging these with radar suitable for picking up small craft is very useful," he says.

Technology can also be used to make the crew's quarters and bridge a safe citadel. Austen suggests securing the accommodation block against attack by the use of a swipe-card access system. This can be used to determine which areas of the ship crew members can access and can be centrally controlled from the bridge.

He believes that low-tech measures can work too. Lights shining outwards from the hull can illuminate an area 50m around the vessel. This makes the detection of an impending attack easier and can also disorientate the pirates.

However Mr Austen thinks the best answer lies in training. "The cheapest and most effective counter to piracy is training and awareness among the crew", he says. "But getting owners to agree to it is the hardest thing to do."