

# The RNLI to the rescue

The Royal National Lifeboat Institution is a registered charity that saves lives at sea. It provides, on call, a 24-hour lifeboat search and rescue service up to 100 nautical miles out from the coast of the United Kingdom and Republic of Ireland and a seasonal lifeguard service on appropriate beaches in the south and south west of England. The RNLI continues to rely on voluntary contributions and legacies for its income. It is independent from Government and does not receive Government funding.



Throughout history, people using the sea have had to face natural dangers and hazards. From 1824, with lifeboats using oars and sails, to the 21st century, with lifeboats using computer technology, those in difficulty in the sea around the United Kingdom and Republic of Ireland have been able to call on the help of the lifeboat crews and lifeguards of the RNLI.

## Lifeboat services in 2005

Launches  
**8,273**  
an average of  
23 a day

Lives saved  
**307**

Total people rescued  
**8,104**  
an average of 22 a day

There are over 230 RNLI lifeboat stations in the United Kingdom and Republic of Ireland, operating a fleet of over 330 lifeboats and four hovercraft. A relief fleet supports the service.

The RNLI also operates seasonal lifeguard units throughout the south and south west of England.

## Lifeboat stations

There are over 230 RNLI lifeboat stations strategically placed around the United Kingdom and Republic of Ireland. Of these, four are on the River Thames in London, and three are inland water stations.

The RNLI's shoreworks department is in charge of building and maintaining station facilities such as boathouses and slipways.



## Lifeguard services in 2005

RNLI lifeguards were called to  
**8,644** incidents

saving  
**71** lives

and assisting a total of  
**9,930** people  
(during summer season)

## How a lifeboat is called out

When someone dials 999 or 112 in an emergency, the operator directs the call to the appropriate emergency service. For emergencies at sea, the call goes to the Maritime and Coastguard Agency in the United Kingdom or the Irish Coast Guard in the Republic of Ireland.

They contact the lifeboat operations manager of the appropriate lifeboat station and request the launch of the lifeboat. If permission is given to launch, the lifeboat crew is alerted by pager, or by maroons (rockets) in the event of pager failure.

The lifeboat crew members leave their jobs or their homes when the pagers go off and arrive at the lifeboat station within minutes of the alarm being raised, whatever the weather or time of day.



## Launching



Lifeboats are launched in a variety of ways, depending on the class of lifeboat and the location.

There are three main ways of launching an all-weather lifeboat: from a mooring; down a slipway; or from a carriage, which is hauled across the beach by a tractor. The second and third of these launching methods need the help of a group of shore helpers, who launch and recover the lifeboat. The shore helpers form a vital part of the team.

Inshore lifeboats are launched in a variety of ways. The D class is usually launched from a trolley. As D class lifeboats and their trailers are quite light, they can usually be manhandled into the water from the trolley. The larger B class Atlantic lifeboats can be launched from a DoDo (Drive On Drive Off) carriage, usually hauled by a waterproof tractor; from a shore-mounted crane called a davit; or from a floating boathouse.

Hovercraft can be launched from any flat area, such as a car park, beach, field or road, providing there is enough room. They are moved from place to place using specialist transporter vehicles.

## Training

It is essential that lifeboat crew members and lifeguards are prepared in the best way possible for their task. Training takes place at lifeboat stations, in mobile training units that visit the coast, and at The Lifeboat College at the RNLI's headquarters in Poole.

The Lifeboat College was opened by Her Majesty The Queen in July 2004. It is a residential training facility designed to deliver consistent, cost-effective training to lifeboat crews and lifeguards, as well as other volunteers and staff. It features an integrated survival centre, incorporating a wave tank, full bridge simulator, live engine workshop and fire fighting simulator. The wave tank is used for inshore lifeboat capsize scenarios and sea survival training. The simulator looks like the wheelhouse of an all-weather lifeboat and uses computer graphics to simulate rescue scenarios.

The College's facilities also include 60 bedrooms, classrooms, a 150-seat auditorium and a restaurant. The use of the College's accommodation instead of hotels means a saving to the RNLI of about £1M annually.



## The lifeboat fleet

The RNLI has an active fleet of over 330 lifeboats, ranging from 5m to 17m in length, as well as a relief fleet. The fleet also includes four active and two relief hovercraft.

Different classes of lifeboat are needed for different places. The class of lifeboat at a particular station depends on the geographical features of the location, the kind of rescue work that the station is asked to do and the cover provided by neighbouring stations.

Hovercraft, which were introduced into the RNLI fleet in 2002, have extended the RNLI's ability to carry out its vital rescue work as they can operate in areas such as mud flats or river estuaries that are inaccessible to conventional lifeboats.

RNLI designers and engineers are continually working on developing new classes of lifeboat and making improvements to existing ones. This enables the RNLI to continue to meet the changing needs of the lifeboat service. RNLI lifeboats can be divided into two categories: all-weather lifeboats and inshore lifeboats.



## All-weather lifeboats

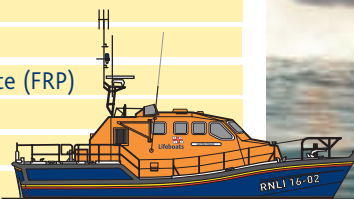
All-weather lifeboats can operate in any weather. They are self-righting after a capsize and are fitted with modern navigation, location and communication equipment. The RNLI allows its all-weather lifeboats a working life of approximately 25 years. The Tamar is the latest all-weather class in the active fleet.

### Tamar

The first Tamar class lifeboat joined the operational fleet in 2006. The Tamar will gradually replace the Tyne class lifeboat. Designed to be launched from a slipway, the Tamar is also able to lie afloat.

The Tamar includes the computerised Systems and Information Management System (SIMS). Using SIMS means that many of the lifeboat's onboard controls can be managed remotely and the crew can remain in their seats for longer. This in turn means that the safety of the crew, which is of paramount importance, has improved even further.

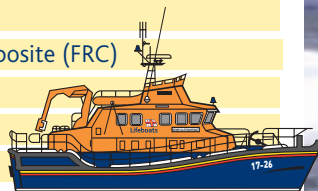
Length	16m
Speed	25 knots
Range	250 nautical miles
Construction	Fibre-reinforced composite (FRP)
Crew	6
Weight	31.5 tonnes
Launch	Slipway or afloat



### Severn

The Severn class lifeboat was introduced in 1995 and is the largest lifeboat in the fleet. It carries a Y class inflatable that can be launched from the Severn with a crane. The Severn shares the same hull shape as the Trent class. The last Severn was built in 2005.

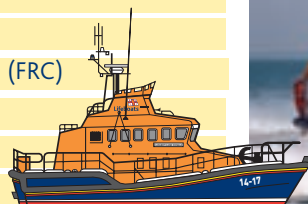
Length	17m
Speed	25 knots
Range	250 nautical miles
Construction	Fibre-reinforced composite (FRC)
Crew	6
Weight	41.5 tonnes
Launch	Moored afloat



## Trent

The Trent class lifeboat was introduced in 1994. It shares the same hull shape as the Severn class but is smaller. The sheerline sweeps down for ease of survivor recovery. The last Trent was built in 2003.

Length	14m
Speed	25 knots
Range	250 nautical miles
Construction	Fibre-reinforced composite (FRC)
Crew	6
Weight	28 tonnes
Launch	Moored afloat



## Mersey

The Mersey class lifeboat was introduced in 1988 and was the RNLi's first 'fast' carriage lifeboat. It was designed to be launched from a carriage but can also lie afloat or be launched from a slipway if required. The Mersey has a slightly 'boxy' wheelhouse set well aft and the sheerline is flattened towards the bow. The propellers are protected by partial tunnels and substantial bilge keels. The last Mersey was built in 1993.

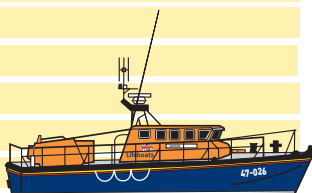
Length	12m
Speed	17 knots
Range	140 nautical miles
Construction	Aluminium or fibre-reinforced composite
Crew	6
Weight	14.5 tonnes
Launch	Carriage, afloat or slipway



## Tyne

The Tyne class lifeboat was introduced in 1982 and was the first 'fast' slipway lifeboat. It is currently the RNLi's main slipway launched lifeboat but can also lie afloat. Features include a low profile wheelhouse and a separate cabin aft of the upper steering position. The propellers are protected by substantial bilge keels. The last Tyne was built in 1990.

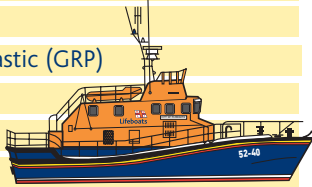
Length	14m
Speed	17 knots
Range	240 nautical miles
Construction	Steel
Crew	6
Weight	27 tonnes
Launch	Slipway or afloat



## Arun

The Arun class lifeboat was introduced in 1971. She has a prominent wheelhouse and upper steering position and carries a Y class boat on top of the wheelhouse. The last Arun was built in 1990 and will be phased out of service by the end of 2006. Recently the RNLI has sold several of these lifeboats to other search and rescue organisations around the world.

Length	16m
Speed	18 knots
Range	230 nautical miles
Construction	Glass-reinforced plastic (GRP)
Crew	6
Weight	29 tonnes
Launch	Moored afloat



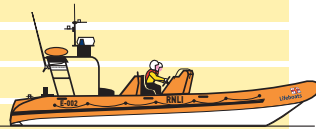
## Inshore lifeboats

Inshore lifeboats usually operate closer to the shore than all-weather lifeboats. They are able to work in shallower water, close to cliffs, sometimes amongst rocks or even in caves. A new version of the B class Atlantic, the Atlantic 85, will be introduced into the fleet during 2006.

### E class

The E class lifeboat was introduced in 2002 and is the fastest lifeboat in the fleet. It is a fast response craft, using waterjets. All the RNLI E class lifeboats are stationed on the Thames.

Length	9m
Speed	40 knots
Endurance	4 hours at maximum speed
Construction	Aluminium alloy with closed cell polythene foam collar
Crew	3
Weight	3.5 tonnes
Launch	Moored afloat



### Atlantic 85 (B class)

A new, bigger version of the B class, the Atlantic 85, is due to be introduced into the fleet in the second half of 2006. Improvements include a faster top speed, radar, provision for a fourth crew member, and more space for survivors. It can operate safely in daylight in up to force 7 wind, and at night up to force 6. The Atlantic 85 is also capable of being beached in an emergency without sustaining damage to the engines or steering gear.

Length	8.5m
Speed	35 knots
Endurance	3 hours at maximum speed
Construction	Fibre-reinforced composite (FRC)
Crew	3-4
Weight	2.4 tonnes
Launch	Trolley, floating boathouse or davit



## Atlantic 75 (B class)

The Atlantic 75 is a rigid inflatable lifeboat. It was introduced into the fleet in 1993 to replace the Atlantic 21. Twelve stations still operate Atlantic 21s. The '75' is derived from the length of the lifeboat, which is nearly 7.5m. In the event of a capsize, a crew member activates a gas bottle to inflate the righting bag. The lifeboat turns upright within a few seconds. The engines are inversion proofed so they can be restarted after a capsize. The Atlantic 75 can be launched in conditions up to near gale force 7.

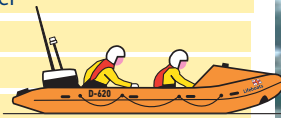
Length	7.5m
Speed	32 knots
Endurance	3 hours at maximum speed
Construction	Glass-reinforced plastic (GRP)
Crew	3
Weight	1.7 tonnes
Launch	Trolley, floating boathouse or davit



## D class

The D class is an inflatable and is the smallest lifeboat in the fleet. It was introduced in 1963 and is ideal for rescues close to shore in fair to moderate conditions. It has a single outboard engine and can be righted manually by the crew after a capsize. The design of the D class has continued to evolve since its introduction. The figures given below are for the latest IB1-type, which was introduced in 2003.

Length	5m
Speed	25 knots
Endurance	3 hours at maximum speed
Construction	Hypalon-coated polyester
Crew	2-3
Weight	436kg
Launch	Trolley or davit



## Hovercraft

Hovercraft were introduced to the fleet in 2002. They are able to operate in areas of mud, sand and very shallow water and are particularly useful for shoreline searches. Lift is provided by the build up of air pressure under the craft and thrust by two large fans mounted on the back that act in the same way as aeroplane propellers. Steering is provided by aerofoil-shaped 'rudders' located behind the propellers.

Length	8m
Speed	30 knots
Endurance	3 hours at maximum speed
Construction	Marine grade aluminium with moulded fibre-reinforced composites
Crew	2-4
Weight	2.4 tonnes
Launch	Bespoke transporter



## Lifeguard equipment

The primary role of the RNLI lifeguards is prevention. RNLI Lifeguards work in partnership with other lifesaving organisations such as SLSA (GB) and RLSS (UK). RNLI lifeguards respond to emergencies on the beach and up to 300m from the shore. They have a variety of equipment to help them, ranging from four-wheel drive vehicles, rescue watercraft and inshore rescue boats, to rescue tubes and boards, first aid kits and defibrillators. The RNLI has also developed standard information signs to ensure that beach safety advice is easy to see and simple to understand.

### Inshore rescue boat (IRB)

The IRB was first approved for use as a surf rescue craft in 1979 in New Zealand and over 600 boats are employed the world over with surf rescue services. Introduced into the RNLI in 2001, approximately 25 of these hand-built craft now support RNLI Lifeguard operations. They have been specifically designed with a heavy surf rescue capability in mind, whilst also being light enough for two persons to launch.

Length	3.88m
Speed	22 knots
Endurance	2 hours
Construction	Neoprene-coated polyester with a hypalon outer surface
Crew	2
Weight	165kg
Launch	Trailer



### Rescue watercraft (RWC)

RWCs have been in service with the RNLI since 2002. The current model is a modified Yamaha XL 700 with rescue sled. It is a very quick and durable surf rescue craft and can be deployed rapidly and operated by one lifeguard. RWCs operate throughout most of the RNLI Lifeguards areas.

Length	3.15m
Speed	40 knots
Engine	700cc / 80hp 2cyl 2 stroke
Endurance	1.5 hours at max speed
Construction	Glass-reinforced plastic
Crew	1-2
Weight	275 kg approx.
Launch	Trailer



## Combined rescue

In the UK, depending on the type of casualty and the location, the Maritime and Coastguard Agency may decide that it is necessary to call on one of its own search and rescue (SAR) helicopters, request a Royal Navy or Royal Air Force SAR helicopter or call on a coastguard mud/cliff rescue team or other group to work alongside the lifeboat. In the Republic of Ireland, the SAR units are coordinated by the Irish Coast Guard and SAR helicopters are provided by them and the Irish Air Corps.

Lifeboats and helicopters can work very closely together in sea rescue, but neither can replace the other as there are jobs that each performs better. Helicopters are able to reach a particular location more quickly and go further out to sea. Lifeboats can stay at sea for long periods, carry more survivors, tow boats and launch quickly to local incidents.

There are occasions when a rescue would not be possible without the teamwork of lifeboat and helicopter crews or coastguard mud/cliff rescue teams working together. Training exercises are organised so that crews become used to working with other SAR teams.



## Supply chain

The Lifeboat Support Centre was opened in Poole, Dorset, in summer 2004. One vast building is used to store and distribute virtually everything needed to run every lifeboat station, lifeboat, lifeguard unit and fundraising office in the UK and Republic of Ireland. There are 750,000 items in all, from whole lifeboat engines to collecting boxes, from packets of soup to hovercraft spares.

The Centre's warehouse team operates a 24-hour emergency duty system so that urgently needed parts can be picked from the warehouse and loaded for delivery within half an hour of a call, 365 days a year. The RNLI's transport fleet, which distributes the items, clocks up hundreds of thousands of miles every year.



## RNLI Heritage Trust

In 2004 the RNLI Heritage Trust was established to care for the future conservation and financing of the Institution's museums and historic artefacts. There are also RNLI heritage collections displayed in some visitor centres, boathouses and sales outlets.

The RNLI has been collecting wonderful artefacts and archive material since its foundation in 1824. Five museums were established between 1938 and 1995 to celebrate the RNLI's work and share the stories of the people behind the objects. Several of the museums are in old boathouses of great character with naturally spectacular seafront locations; others are in modern purpose-built museums, but each is unique.



**Lifeboat!** at Chatham Historic Dockyard – displays 17 history-making lifeboats.



**The RNLI Grace Darling Museum** at Bamburgh – a new museum celebrating Victorian Britain's greatest heroine (reopens in summer 2007).



**The RNLI Lifeboat Museum** at Whitby – a fascinating small museum housed in a double boathouse.



**The RNLI Zetland Museum** at Redcar – home of the *Zetland*, the oldest surviving lifeboat in the world.



**The RNLI Henry Blogg Museum** at Cromer – named after the most decorated lifeboatman, who saved 873 lives. Visit this new family friendly museum, which opened in April 2006.

## How can you help the RNLI?

You can help the RNLI in a variety of ways. There are three adult grades of supporter: Shoreline, Offshore membership and Governor, plus Storm Force, which is a club for children. As well as joining, you can also give a regular or one-off donation, make the RNLI your chosen charity when you take part in a sponsored event, support the RNLI through your Trust, or remember the RNLI when you write your Will.

You may want to get involved in fundraising activities – why not contact your regional office or RNLI headquarters and find out more? (or visit the website for more information)

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## This factsheet is one of a series.

Other titles available are:  
**The RNLI today** – SAP code INF011  
**The People of the RNLI** – SAP code INF012