Lifeboats

The Shannon class lifeboat

The RNLI is the charity that saves lives at sea

Photo: RNLI/Nigel Millard

RNLI.org

Shannon class: facts and figures

Launch type: carriage
Crew: 6
Survivor capacity: self-righting – 23; non self-righting – 79
Length: 13.6m
Max speed: 25 knots
Range/endurance: 250 nautical miles
Engines: 2 x 13-litre 650hp Scania D13 engines Twin Hamilton HJ364 waterjets
Fuel capacity: 2,740 litres
Construction: hull: fibre-reinforced plastic

Photo: RNLI/Nigel Millard

Trevor Bunney
Dungeness Lifeboat Station Mechanic

What kind of lifeboat is this?

The Shannon class is an all-weather lifeboat, so she's designed to operate in the worst of sea conditions. She is a self-righting lifeboat, so she will automatically turn the right way up in the event of a capsize.

How is the Shannon launched?

This class can be beach-launched with her new tractor-borne carriage. After being recovered from the beach bow first, a turntable in the carriage rotates the Shannon ready for its next launch.

What sort of rescues is the Shannon designed for?

With a top speed of 25 knots and a range of 250 nautical miles, this lifeboat is ideal for offshore searches and rescues in calm or rough seas. Her power means she can tow large vessels out of danger – and waterjet technology allows her to manoeuvre in shallow waters or be intentionally beached in an emergency.

What do the volunteer crew members think of this lifeboat?

Dungeness Mechanic Trevor Bunney says: 'The manoeuvrability of a jet-driven boat is phenomenal, it really has to be seen to be believed. The launch and recovery equipment help us get safely back to shore no matter what the conditions.'

To find out how to visit our lifeboat stations go to RNLI.org/comevisitus

The RNLI is the charity that saves lives at sea

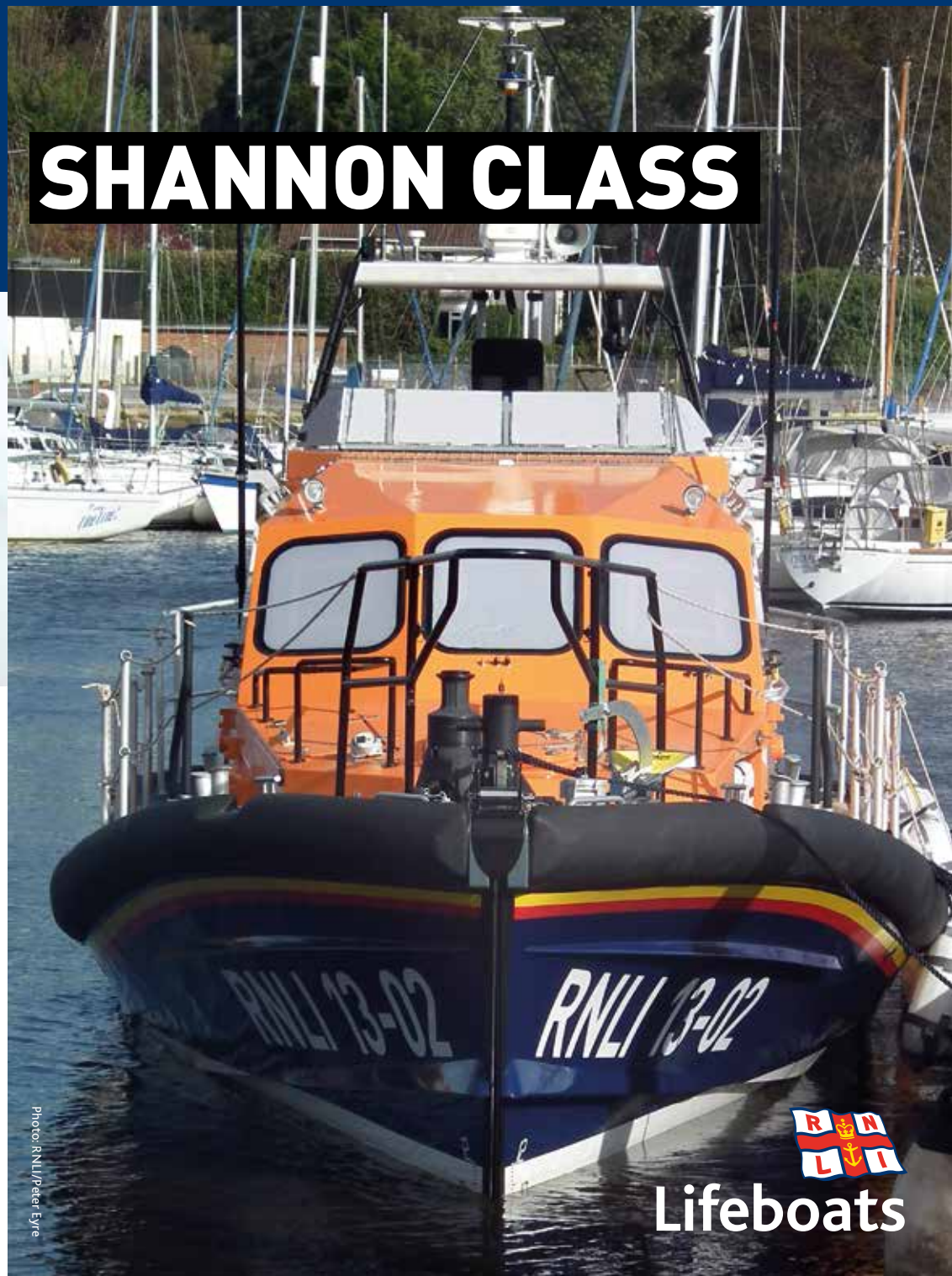
Royal National Lifeboat Institution, a charity registered in England and Wales (209603) and Scotland (SC037736).
Registered charity number 20003326 in the Republic of Ireland

RNLI.org

Tel: 0300 300 9990 (UK) 1800 789589 (RoI)
RNLI Headquarters, West Quay Road, Poole, Dorset, BH15 1HZ

INF038-11
August 2015

ALL-WEATHER LIFEBOAT FACTSHEET AND POSTER



SHANNON CLASS
LIFESAVING FEATURES

DECK

The aft deck has a lot of space, giving the crew a good platform for performing casualty evacuations with rescue helicopters, and making it easier to set up tows.

The foredeck restraint and launch mechanism allows the coxswain to release the boat from its carriage via the upper steering position.

WATERJETS

The Shannon is the first modern-generation all-weather lifeboat to run on waterjets rather than propellers. This allows the vessel to operate in shallow waters and to be intentionally beached. Waterjets give the coxswain greater control when alongside other craft, in confined waters and in all sea conditions.

The waterjet intake is located below the transom and is protected by grills to stop large debris damaging the impellers. At maximum power, this craft pumps 1.5 tonnes of water each second from its waterjets.

ENGINES

Two 650hp Scania engines help the Shannon to achieve 25 knots. In fact, she only needs 80% of her power to do so, meaning the engines don't have to work so hard and should last longer.

Each engine has its own 1,370-litre fuel tank. These can be refuelled at a rate of 200 litres a minute, so the lifeboat will never be out of action for long.

STEERING

The Shannon has two steering positions: one at the upper steering position (pictured), which offers an elevated 360° view, and one in the wheelhouse, which provides shelter in challenging conditions.

CASUALTY CARE

A comprehensive suite of medical equipment is carried including oxygen and full resuscitation kit, Entonox for pain relief, large responder bag and three different stretchers. The basket stretcher can be securely mounted on the wheelhouse floor.

SEATS

The specially designed suspension seats protect the volunteer crew from the most extreme wave impacts. They provide a comfortable workstation and from the safety of every seat the crew can control and monitor the SIMS screens using an integrated tracker ball control. Controls for the VHF radio and intercom are also integrated within the armrest while the helm has full control of the steering, jet buckets and throttles at their finger tips.

CONTROLS (SIMS)

The Systems and Information Management System (SIMS) allows crew members to control the lifeboat and access information from their seats in the wheelhouse. It means they spend less time standing up and moving around the vessel and are therefore less prone to injury in rough weather.

SIMS provides access to all communications (VHF and MF radio, direction finder [DF], intercom), navigation (radar, chart, global positioning system [GPS], depth and speed) and machinery monitoring including engines, transmission, fuel and bilge.

Local control for each workstation is by means of a large trackball with selection buttons and each screen is adaptable for operation in direct sunlight and fully dimmable for night operation.

IDENTIFICATION

All lifeboats have a unique identification number. The first part of the all-weather lifeboat's number indicates the class. All Shannon class lifeboats begin with 13 because they are just over 13m in length. The numerals after the dash refer to the build number, so the first Shannon to be built was given the number 13-01.

LAUNCH AND RECOVERY SYSTEM

The tractor and powered carriage system operate as a mobile slipway, solving the RNLI's unique challenge of transporting, launching and recovering the 18-tonne Shannon class over some of the most demanding beaches at lifeboat stations where there is no slipway or harbour and where there may be considerable tidal range.

A carriage-mounted cradle rotates the vessel through 180°, greatly reducing the time between recovery and the vessel being ready to be relaunched.

HULL

The shape of a boat's hull is the most important factor in how she'll handle at sea.

During the development of the Shannon class lifeboat, a number of different hull shapes were trialled. The chosen hull gives the smoothest ride through rough seas.