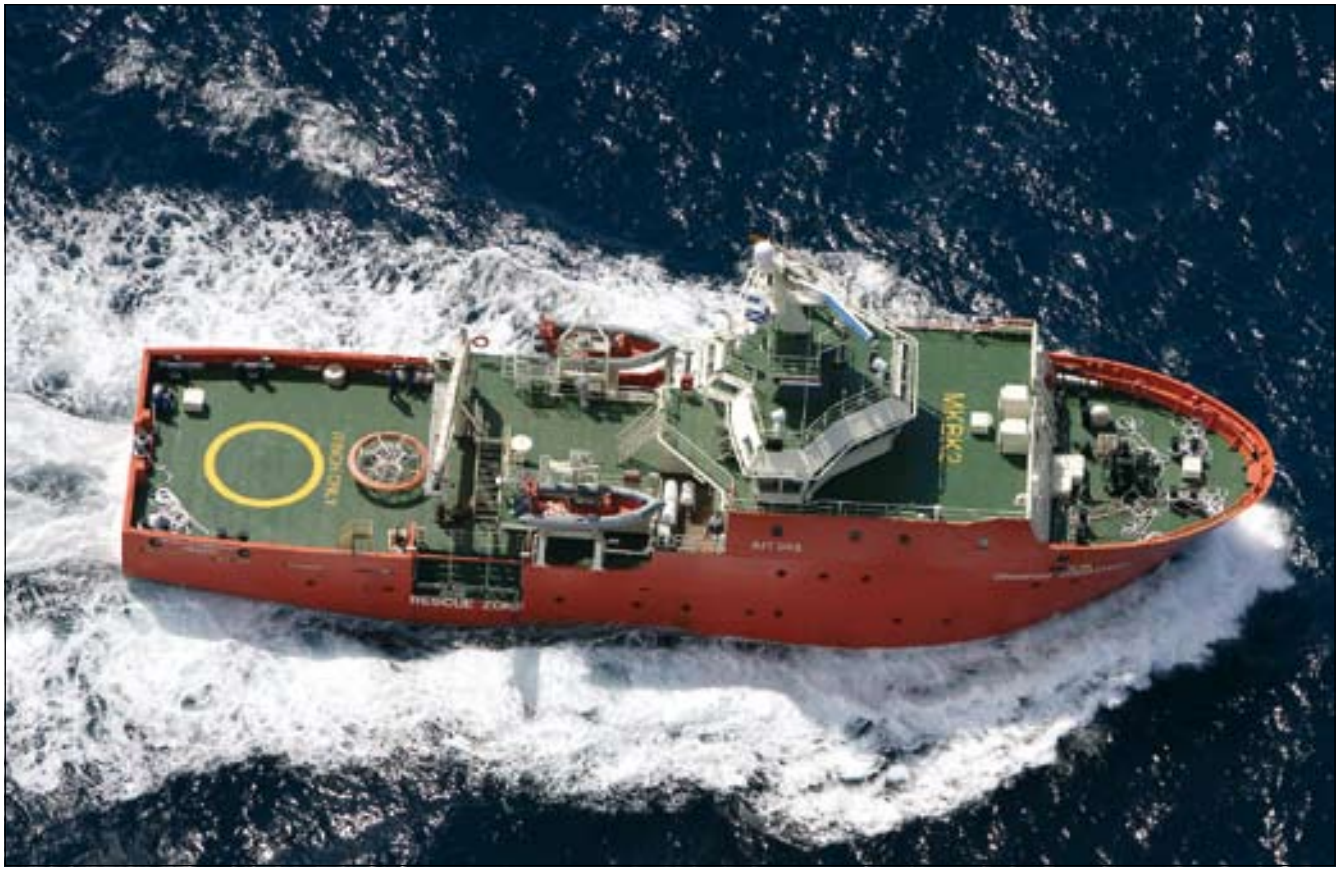


First of seven for North Sea standby duty

Grampian Commander **is the first completion of a series of seven standby emergency response and rescue vessels to be built by Astilleros Balenciaga for Aberdeen, Scotland-based North Star Shipping Ltd. The 48.33m x 11.80m vessel was completed a full month ahead of the contracted delivery date.**

In line with most of the North Star fleet, this vessel is engaged in essential standby and emergency response and rescue duties, primarily supporting oil rigs in the demanding conditions of the northern sector of the North Sea. It is a Group B standby rescue vessel, designed and outfitted to rescue up to 300 people in the UK sector.

The concept design work was carried out by the UK-based IMT, in close co-operation with the ship owner's technical staff and has received the reference number IMT948. It has a high freeboard and full lines above the water line forward, for confronting heavy North Sea weather conditions. The forward facing full breadth deckhouse front on the forecastle deck offers a large wall to shield the wheelhouse, which is located quite far aft. A crew capacity for up to 16 in single cabins is provided, together with dedicated survivor accommodation and treatment areas of potentially up to 300 people.

Below decks the vessel is subdivided into the bow thruster and generator set compartment aft of the fore peak, separated from an engine control room compartment by means of a watertight remotely operated hydraulic door, the engine room aft and an engineer's workshop, just forward of the aft peak. All of theses spaces are flanked by wing tanks effectively forming a double hull throughout the length of the vessel.

Power is provided by a single MaK 8M20 main engine developing 1,520kW at 1,000 rev/min, driving a Scana Volda controllable propeller propulsion system through a flexible coupling.

A 280kW Schottel SRP 170-ZSV retractable azimuth propulsion unit, is mounted forward, which can be driven separately by a dedicated control both at forward and aft control stations, or in conjunction with the main propeller and steering system by means of a single joystick lever. This unit also provides the vessel with a redundant means of propulsion in the event of a main engine failure, since it can be driven by the generating sets. It can also be used for loitering, with the main engine

OWNER
North Star Shipping, Aberdeen.

BUILDER
Astilleros Balenciaga, Spain.

DESIGNER
IMT, Scotland.

DIMENSIONS

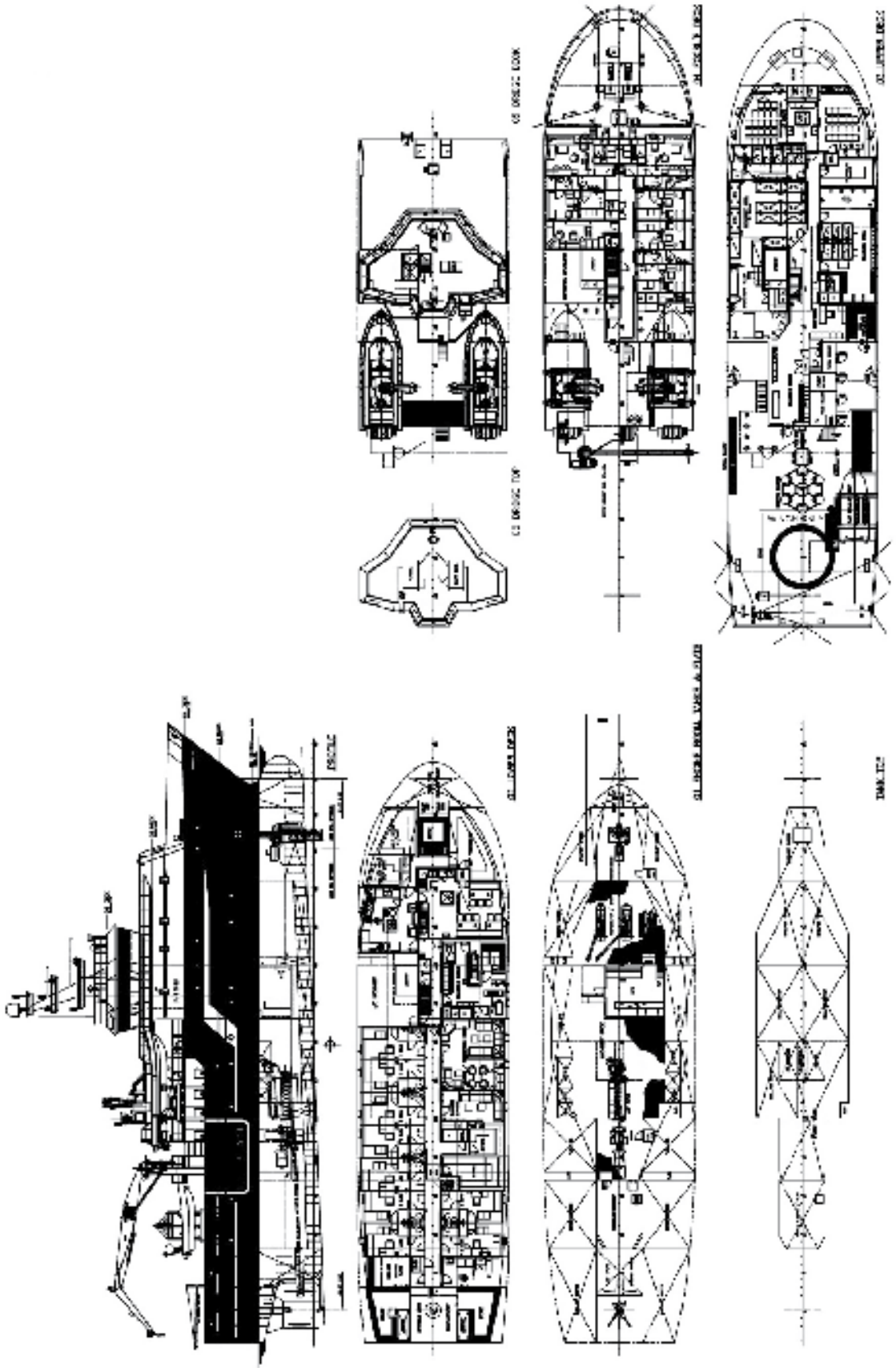
Length overall	**48.33m**
Beam	**11.80m**

MAIN ENGINES
A single MaK 8M20 main engine developing 1,520kW at 1,000 rev/min, drives a Scana Volda CP propulsion system.

ADDITIONAL PROPULSION
A 280kW Schottel SRP 170-ZSV retractable azimuth propulsion unit, is mounted forward.

AUXILIARY POWER
Two 350kWe Volvo gensets, a Volvo 190kW harbour set and a Leroy Somer shaft alternator of 650kWe.

EQUIPMENT
Bloksma coolers, Azcue pumps. Cosalt rescue basket.



GRAMPIAN COMMANDER

shut down significantly reducing fuel consumption.

The generating plant comprises two 350kWe Volvo D12-Aux generating sets and a Volvo TAMD 103-RC 190kW emergency/harbour generating set fitted on the upper deck. Additionally to these, there is a Leroy Somer shaft alternator of 650kWe.

The single propeller combined with the high lift rudder and azimuthing bow thruster, give the ship excellent manoeuvrability and necessary control for station keeping and tracking, when centrally controlled by the Schottel "Masterstick" joystick system. All propulsion units can be operated by means of individual controls from the fore and aft stations in the wheelhouse, as well as from the independent joystick system provided, which has three fixed control panels, one each on bridge wings and in the aft control console of the wheelhouse. All diesel engines are cooled by means of Bloksma box coolers.

The entire ship has been fitted out with pumps manufactured by Bombas Azcue. Amongst these, there is a large electric pump supplying the regulatory superstructure deluge system, with jet nozzles distributed around the superstructure and the whole perimeter of the vessel, providing protection from any irradiated heat the vessel may need to face during rescue operations.

To meet the latest IMO requirements regarding pollution prevention, the propulsion engines have been manufactured and have certificates of compliance with exhaust gas emissions criteria. Similarly a sewage treatment plant and bilge water separator have been fitted.

The air conditioning plant and accommodation ventilation has been designed for operation world-wide. The system, supplied and fitted by Frivasa, is designed to keep the accommodation at the appropriate comfort levels throughout the year. Additional heating is provided by means of an oil fired boiler.

The accommodation is divided into three levels with the wheelhouse being the fourth. Most of the crew's quarters are sited on the main deck, and primarily consists of single cabins with en suite facilities. Forward on this deck is the galley with direct access to refrigerated provisions rooms and adjacent to it is the mess room, day rooms, changing rooms, a small gym and sauna.

On the upper deck adjacent to the rescue zone amidships, there is direct access from the weather deck for survivors to enter the shelter of the accommodation. All the regulatory zones and equipment, required for this kind of vessel, have been carefully studied and laid out to enhance a speedy access and flow of survivors to the different treatment, resting or sitting areas. On the outside deck, clean up showers are sited. Able survivors can then access the reception waiting area with seating. From here they would be directed to a treatment room, recovery area, outfitted with beds, or to the sitting area, depending on their needs. The forecastle deck holds the comfortable and spacious cabins for captain and chief engineer.

Forward in the wheelhouse there is a console with all the ship's controls as well as two radars, some radio equipment, and onboard communication systems. The forward console has split consoles, with a sliding helm seat in the middle, providing the skipper with a comfortable steering position that has all manoeuvring controls at hand. This is also the case in the aft console. On the bridge wings there are two consoles with fixed joystick controls providing excellent visibility over the rescue and FRC deploying zones. The chart table, with chart drawers underneath, lies adjacent to the GMDSS A3 console.

For rescue operations, the vessel is provided with two Avon Searider 6.5m fast rescue craft which are raised and lowered by suitable hydraulically operated davits. Other appliances for rescuing survivors from the water are the Dacon scoop, and a Cosalt rescue basket.