

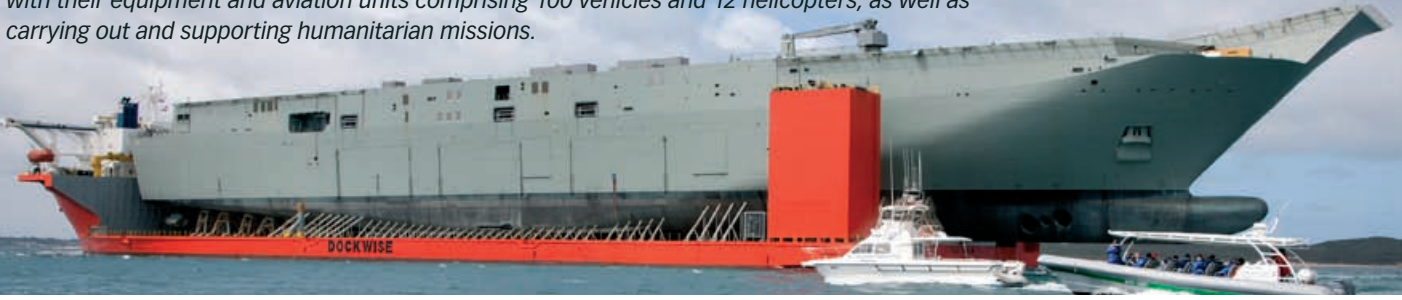
RoRo

Specially-designed RoRo outfits for naval LHDs



CANBERRA CLASS LANDING HELICOPTER DOCK (LHD), ROYAL AUSTRALIAN NAVY

The hull of the future LHD vessel HMAS Canberra arrives in Australia. The 231m-long ship's multi-function role will be to transport and deploy an embarked force of over 1,100 personnel, along with their equipment and aviation units comprising 100 vehicles and 12 helicopters, as well as carrying out and supporting humanitarian missions.



The challenge

In 2008, MacGregor won a contract to deliver specially-designed RoRo outfits for two logistic support vessels, HMAS Canberra and its sister vessel HMAS Adelaide. The vessels are Canberra Class Landing Helicopter Docks (LHDs), under construction for the Royal Australian Navy (RAN).

The vessels are being built in a collaboration between Navantia Shipyard and BAE Systems Maritime. Navantia is a world leader in the design, construction and integration of state-of-the-art naval ships. MacGregor has a long established working relationship with Navantia and in 2006 delivered similar equipment for the LHD Juan Carlos I for the Spanish Navy.

The ships are being built using a modular construction method. Each hull, from the keel to the flight deck level, is being constructed from 104 individual blocks, each fabricated and fitted out at Navantia's facilities in Ferrol and Fene in Spain, before being combined on the slipway at the Ferrol shipyard.

BAE Systems Maritime will construct the superstructures and complete the ships at Williamstown, Australia.

The solution

MacGregor's solution will provide the Australian Defence Force with one of the most capable and sophisticated air-land-sea amphibious deployment systems in the world. The MacGregor access equipment for each ship includes: a stern ramp/door that provides access between the well deck and the quay for landing craft and vehicles; two side ramps/doors that enable access for

65-tonne vehicles between the heavy vehicle/cargo deck and the quay; one vehicle/cargo lifting platform; two shell doors; and one internal rampway door.

The delivery also includes a complete integrated logistics support (ILS) package.

Key factors in winning the contract include MacGregor's know-how and extensive experience in the turnkey delivery of cost-efficient systems and solutions that meet strict naval quality procedures and standards. MacGregor has a proven track record of naval deliveries and has out-fitted more than 250 naval vessels to date.

Service 24/7

MacGregor's worldwide marine service network consists of more than 60 service centres in major ports. Trained engineers and service personnel are available 24/7, 365 days/year. Original MacGregor spare parts and repair services can be supplied on a planned schedule, on demand or on an emergency basis.

Scope of supply of MacGregor access equipment per vessel

- Turnkey: design, hardware, manufacturing, complete ILS package and commissioning
- One 8m-long, 19m-wide stern ramp/door
- Two 11.7m-long side ramp/doors
- One cantilever-type vehicle/cargo lifting platform (10m x 3.3m) with a safe working load of 20 tonnes serving deck levels 1 to 4
- Two shell doors
- One watertight rampway door.

HMAS Canberra and its sister vessel HMAS Adelaide will be commissioned in 2014 and 2015 respectively.



The MacGregor equipment was fabricated by our local Spanish production partner.



The MacGregor side ramp block.



HMAS Canberra and HMAS Adelaide, are the largest ships ever built for the Royal Australian Navy.



Lloyd's Register Quality Assurance certifies that the Quality Management System for MacGregor is ISO 9001:2008 compliant.

MacGregor is the world's leading brand of engineering solutions and services for handling marine cargoes and offshore loads. MacGregor products serve the maritime transportation, offshore and naval logistics markets, in ports and terminals as well as on board ships. Our cargo flow solutions integrate cargo access, stowage, care and handling functions to suit a particular ship's cargo profile. This benefits its productivity, environmental impact and profitable service lifetime. www.macgregor-group.com

MacGregor is part of Cargotec. Cargotec's sales totalled EUR 3.3 billion in 2012 and it employs approximately 10,000 people. Cargotec's class B shares are quoted on NASDAQ OMX Helsinki under symbol CGCBV. www.cargotec.com

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