

HARSTAD: New coastguard vessel for management roles

Builder's nameAker Brattvåg, Søviknes DesignerRolls-Royce	
Marine, Ulsteinvik, Norway Design typeUT, 512	Des
Vessel's name	Ves:
Owner/OperatorRemøy Shipping/Norwegian	Owr
Coastguard	
CountryNorway	Col
FlagNorway	Flag
Total number of sister ships already completed0	
Total number of sister ships still on order0	Tota
Contract dateSeptember 2003	
Delivery dateFebruary 2005	Deli

new Norwegian Coastguard multi-role vessel Harstad, Abuilt by Aker's Søviknes yard, in western Norway, based on steelwork from Aker Tulcea in Romania was designed by Rolls-Royce. The vessel is owned by Remøy Shipping, which operates it on long term charter to Kystvakten.

Harstad undertakes a variety of coastguard and EEZ (Exclusive Economic Zone) management roles. These include offshore standby and rescue, firefighting, salvage, general law enforcement operations, and fishery control. One important duty is pollution prevention. There is concern over the rapidly increasing oil tanker traffic from Russian ports along the coastline of northern Norway, with the risk of a disabled vessel grounding and causing an oil spill. Harstad is therefore fitted for emergency towing of tankers up to about 200,000dwt and spill clean-The vessel will be manned, as are other Norwegian coastguard vessels, by a combined military and civilian

A new Rolls-Royce design, the 83m long UT512, was developed to meet the challenging requirements. A bollard pull of about 110tonnes is combined with a speed of about 18.5knots to enable the vessel to reach the scene of an incident quickly and then tow a stricken vessel to safety.

an incident quickly and then tow a stricken vessel to safety. Operation along the full length of Norway's coastline and throughout the country's exclusive economic zone will involve much time spent in the Barent's Sea, so ICE 1B class has been specified, along with anti-icing measures such as heated shelters for the two MOB/boarding boats. For towing and emergency work, this UT 512 design has TUG notation and includes an optimally located towing winch, a reinforced pushbow, FiFi 1 firefighting

capability, a hospital, and extensive equipment including line throwing gear, a harpoon system for attaching the tow wire to stricken vessels, oil spill booms and skimmers, and 1000m³ of tankage for recovered oil. For its patrol boat role it has a foredeck mounted gun and it is equipped with fast rescue/boarding boats and a full military and civilian communications system.

As well as the design, Rolls-Royce has provided a complete package of equipment. The main propulsion engines will be two 8-cylinder Bergen B32:40L diesels, each developing 4000kW, turning Kamewa Ulstein CP propellers in nozzles. Independent Tenfjord steering gears operate the high lift rudders, and there are two electrically driven thrusters at the bow. One is a 736kW Kamewa Ulstein tunnel thruster and the other is an Ulstein Aquamaster swing-up azimuth thruster rated at 883kW. Fire pumps are driven from the main engines through power take-offs.

A Rauma Brattvaag deck machinery package has been specified, comprising a main low pressure hydraulic towing winch with a 50tonne pull and 250tonne brake holding load, anchor windlass, capstan, and tugger winch. Towing pins and a hydraulic deck crane are also provided.

This coastguard vessel is the first to be fitted with the new Rolls-Royce Poscon2 DP system (AUTS notation), and it has a full UMAS automation system.

Accommodation is provided for up to 35 people in single and twin berth cabins with full facilities. The superstructure is placed near amidships to reduce motions, and Harstad is also equipped with a passive roll reduction system.

PRINCIPAL PARTICULARS

Length, oa	83m
Length, bp	70.9m
Breadth moulded	15.5m
Depth, moulded	7.2m
Gross tonnage	approx 3120tonnes
Max draught	6m
Bollard pull	110tonnes
Design, deadweight	1500tonnes
Speed, service	16knots
Max speed	18.5knots
Classification Society and Notations	Det Norske
Veritas +1A1, E0, Ice 1B,	TUG, ORO, DYNPOS
	ALITS FIELD CLEAN

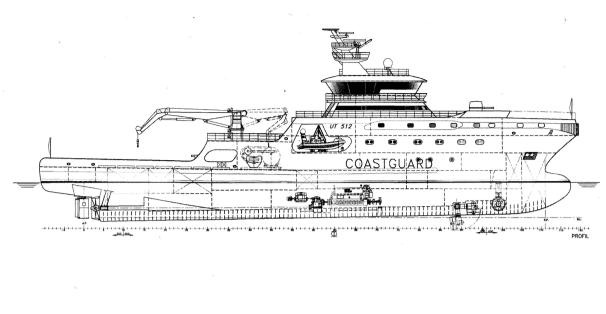
MakeBergen			
ModelB:32:40L8P			
Number2			
Output of each engine4000kW			
Gearboxes			
MakeUlstein, Rolls-Royce			
Model1500 AGHC			
Number2			
Output speed205rev/min			
Propellers			
MaterialBr			
ManufacturerKamewa Ulstein, Rolls-Royce			
Number2			
PitchControllable			
Speed			
Open or nozzledNozzled			
Alternators			
Number2			
Make/typeShaft alt PTO/PTI 1800kW			
Speed of each set1800rev/min			
Bow tunnel thruster			
MakeKamewa Ulstein, Rolls-Royce			
Number1			
Output of each736kW			
Bow swing up Azimuth thruster			
MakeUlstein Aquamaster, Rolls-Royce			
Number1			
Output of each883kW			
Deck machinery1 windlass, 1 tugger winch,			
2 capstan, shark jaw/towing pins, 1 towing winch,			
supplied by Rauma Brattvaag/Rolls-Royce; 1 deck			
crane 5tonne-15m			
Bridge electronics			
Engine monitoring/fire detection systemUMAS			

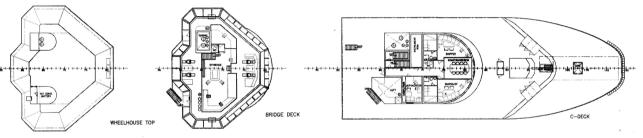
Other significant or special items of equipment......1000m3 recovered oil ORO; push bow arrangement; prepared for

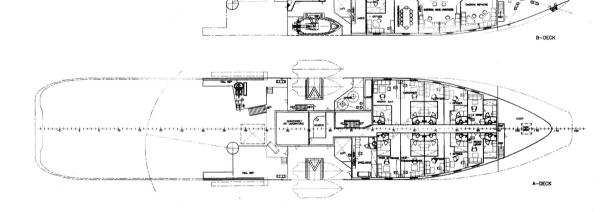
Main engines

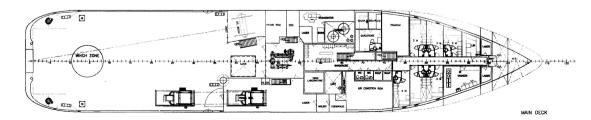
Complement Crew... Number of cabins...

installing Nato submarine rescue system









SIGNIFICANT SMALL SHIPS OF 2005