Recycling of Rame Head



Auxiliary Support Vessel





Defence Equipment & Support

MINISTRY OF DEFENCE

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Executive Summary

Ex-Auxiliary Support Vessel Rame Head ceased active service with UK MOD on the 27th March 2008.

Following a long and distinguished service which included a part in World War II supplying much needed food and war materials from the US to the UK, she was eventually consigned to a recycling and recovery operation and an invitation to Tender Competition which was issued in August 2008.

The successful winning bidder was the Ghent based company Van Heyghen Recycling (part of international Galloo Recycling Group) and Rame Head left HMNB Portsmouth under tow for Belgium on the 25th Feb 2009.

On the 8th March 2010 Van Heyghen Recycling reported that Ex-Auxiliary Support Vessel Rame Head had been completely dismantled and recycled in accordance with all relevant EU Waste Management Legislation and the UK's Ship Recycling Strategy.

Of all the materials that are required to build a ship of this type over 95% of the material was recycled and recovered, thereby significantly reducing its impact on the environment at the end of its life



To equip and support our Armed Forces for operations now and in the future

Picture circa 1945; for illustration only



Background

General Particulars

Date and Place of Build	Laid Down: 12 July 1944. Launched: 22 November 1944. Completed: 18 August 1945.		
Historical Interest	The Vessel was the last surviving British designed Canadian built Second World War 'Fort' class merchant cargo ship, the British/Canadian version of the Victory and Liberty ships. During World War II the vessel acted as a lifeline to Britain as part of the Atlantic convoys that brought much needed food and war materials from North America to the UK.		
	Rame Head was one of 3 Support Vessels. The Sister ships were HMS Berry Head and HMS Duncansby Head.		
	When moored in Portsmouth Harbour, HMS Rame Head was frequently used by the Special Boat Service when training in ship assaults. Such training included Close Quarters Battle (CQB) drills, ship boarding techniques and underwater demolitions.		
	Onboard there were a number of items that were of historical interest – the DSA made provision to offer the items on board to interested parties.	Propeller Rudder Gear Triple Expansion Engine Light Fittings/lamp shades Compass/binnacle Old Style Canvas fire hoses/hose baskets Broadcast speakers Telephones Loud speakers	

Date ceased service	27 March 2008
Type of Vessel	Auxiliary Support Vessel (Submarines).
Summary of condition	Sound for Towing, not in running condition.
Length OA	441.5 ft (134.6m)
Length BP	416 ft (126.8m)
Breadth	57.5 ft (17.5m)
Height from WL	36 ft (11m)
Max height WL(estimated)	72 ft (22m) (to funnel top, mast is removed).
Last Docking	2000
Last Refit	1967

Background on the Disposal Services Authority (DSA)

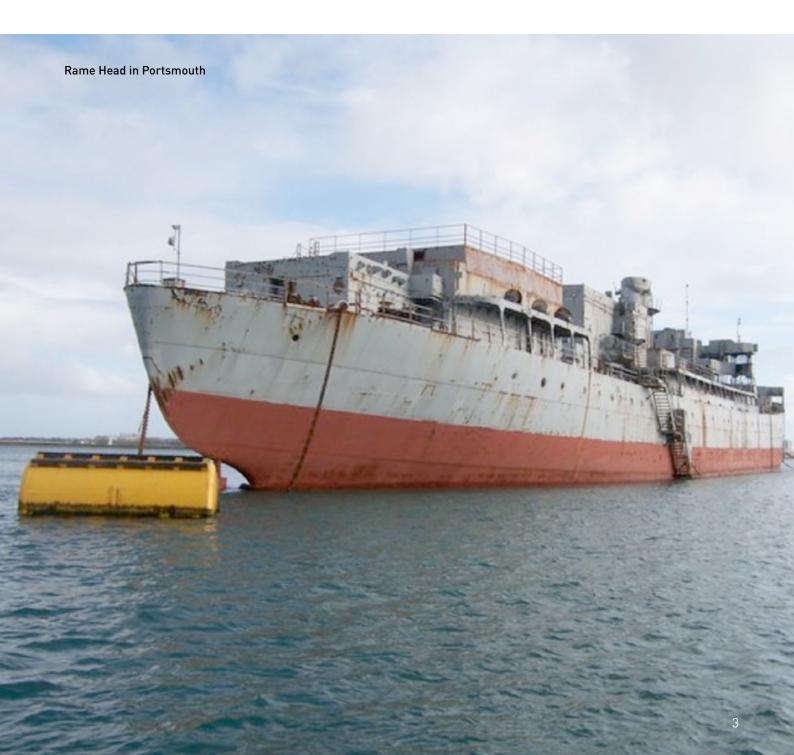
- The DSA has delegated authority to dispose of all UK MOD surplus equipment in the UK and overseas.
- The DSA's role is to dispose of surplus assets identified by the owner for release into the commercial market.
- The DSA is the only Government Organisation offering a completely managed service for the Re-use, Recycling and ultimately disposal of surplus government assets.

The Ministry of Defence's primary aim is to sell surplus ships for further use but where this is not possible (for instance, when ships are no longer seaworthy and are only suitable for recycling) its objective is to ensure that the vessel is recycled in a safe and environmentally sound manner, and in compliance with its legal responsibilities as a producer of waste.

There was little interest in preserving Rame Head as an historic vessel. Only one organisation expressed an interest in preserving the vessel for this means. However they were not able to secure funding and thus did not submit a tender.

Introduction

Following on from the successful recycling of HMS Fearless and Intrepid and the Type 42 Destroyers – HMS Cardiff, Glasgow and Newcastle the latter of which were completed in July 2009 the DSA conducted a further tender exercise for the sale and recycling of Rame Head in August 2008. The vessel was sold on an "as seen as lying" basis for recycling within the Organisation for Economic Co-Operation (OECD) and in full compliance with the principles of the Basel Convention and all other associated EU & UK legislation including Regulation (EC) No 1013/2006 of the European Parliament and the Council of 14th June 2006 on Shipments of Waste.



Competition

Information and Requirements

Tenders were limited to bidders from within the Organisation for Economic Co-Operation and Development (OECD) – as recommended by the UK Ship Recycling Strategy (SRS). Tenders were received from countries such as Turkey, Ireland, USA and France. The preparation of the vessel by the MOD's Disposal Reserve Ship Organisation (DRSO) again played a vital part in the process and an inventory of hazardous materials 'Green Passport ', highlighting the hazardous material on board was produced, along with a Type 2 Asbestos survey. Both of which were included as part of the tender documents. The activity conducted by DRSO demonstrates to ship owners the value in investing in the preparation of vessels for disposal and is of enormous benefit to the UK MOD as it continues to set standards for the dismantling of Government owned vessels.

This information was provided to all bidders to enable them to identify key environmental issues and cost drivers in their tender responses. The DSA secured additional provisions from the bidders in the form of a substantial financial bond, acting as security to ensure that the vessel was recycled in the destination stated and not reflagged and taken to a non-compliant yard outside the OECD and unusually because of its historic nature, secured a commitment to make items of a historical nature available on a commercial basis.

The recycling of ships is covered by a range of UK and EU legislation for which Department for Environment, Food and Rural Affairs (DEFRA) is the lead department in the UK. This Legislation includes but is not limited to:

- the Waste Shipments Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006
- parts of the Radioactive Substances Act 1993
- Environmental Protection (Duty of Care) Regulations 1991 SI 2839
- Hazardous Waste (England and Wales) Regulations 2005 SI 894
- Health & Safety at Work etc 1974
- Control of Asbestos at Work Regulations 2006

Safe tow to final destination



Ship Recycling Evaluation

Following the recommendations of the SRS, the DSA once more convened a Ship Recycling Evaluation Committee, involving representatives from Defra, Maritime Coastal Agency (MCA), DRSO and the DSA to assess the tender responses against set criteria called for in the Strategy. Prospective purchasers were required to produce a detailed Ship Recycling Plan, demonstrating their understanding of all the requirements involved in Ship Dismantling against each of the following:

- Facilities & dismantling methodology
- Health & Safety
- Environmental plans
- Operations, sub-contractors
- Licences & permits
- Media, and Trans-Frontier Shipment of Waste (TFS)

The Ship Recycling Plan is paramount to the consideration of offers to purchase and should provide evidence to enable the Evaluation Committee to score against.

Award of Preferred Bidder Status

The committee awarded preferred bidder status to Belgium Company, Van Heyghen Recycling, based in Ghent who are part of Galloo Recycling Group. A formal contract was awarded in November 2008 once the appropriate consents were obtained, in accordance with the provision of the EC Waste Shipments Regulation 10313/2006. On the 25th Feb 2009 Rame Head was transferred from MOD ownership and Naval Base Commander (Portsmouth) custody to Van Heyghen Recycling.

Recycling of Rame Head

Van Heyghen Recycling was required to provide a monthly breakdown of the outturn of metals and waste during the recycling programme. This was combined with regular photos, updates and notification of the final destination of the waste.

Audits were conducted by the DSA during the life of the project – involving a physical inspection of the yard at Van Heyghen Recycling, together with an audit of weighbridge tickets, licences and consignment notes (which were checked against the reported outturn).

Photographic evidence was also taken at key stages of the dismantling process, which ensured that the DSA could be confident on the method and manner in which the vessel was dismantled and of paramount importance, that it was completed in accordance with the aims of the SRS. In addition to these checks, the yard was also subjected to the demanding audits and inspections of the Belgium Regulatory Authorities, ensuring that the company were adhering to all current Health & Safety and Environmental legislation and the terms of their waste management permit.



Rame Head on Quayside



On route to the slipway



Photographic Evidence



Further dismantling of the superstructure



First phase of Asbestos removal



Pipe work Removal of the Asbestos isolation on the bulk heads in the boiler room



Dismantling forward structure removed up to the funnel



Deck 3 prior to being cut & removed



Rame Head on the Slipway



Pipe work & engine room prior to removal



Recycling Of Vessel on the Slipway

Final Outturn

At the start of this project a 'Green Passport' was produced by DRSO and they had the unenviable task of trying to identify what hazards were contained within this 65 year old vessel. The final report produced by Van Heyghen Recycling showed the actual outturn which is compared against the estimate given in the green passport and sales documents.

(All figures in Tonnes)	Green Passport Estimate	Actual	Destination
Steel (Ferrous)	7175	5527	Sale
Aluminium	25	45	Sale
Copper	200	258	Sale
Stainless Steel	25	12	Sale
Wood	-	28	Recycled
Concrete	350	1936	Recycled
Residual	-	26	Landfill
Asbestos	100	170	Landfill
TOTAL	7875	8002	

Final Destination	Tonnes	%age of Total
Re-use/Sale	5842	73%
Recycling	1964	24.55%
Waste (Landfill)	196	2.45%
TOTALS	8002	100%

Van Heyghen Recycling reported an Asbestos Outturn of 170 tonnes against the estimate of 100 tonnes given in the Asbestos Report produced prior to disposal.

Estimating asbestos tonnage is notoriously difficult since the thickness and density of the material varies dramatically throughout the ship. This was exacerbated in Rame Head by the age of the ship and the large number of inaccessible areas. One other major waste stream that was slightly problematic for the ship recycling company was the amount of concrete that was found in the vessel as ballast. The low figure given in the Green Passport was due to the inaccessibility to the material at survey stage. Unfortunately this situation sometimes occurs in ship recycling as materials only become visible and therefore accessible as the vessel is being dismantled. Fortunately however, Van Heyghen Recycling found a recycling outlet for the concrete ballast so the 1936 tonnes recovered from Ramehead was not consigned to landfill. This example also highlights why working with the Shipbreaking Industry is the only solution for environmental sound management of ships.

Conclusion

Rame Head was completely recycled in March 2010, just 12 months after arriving at Van Heyghen Recycling yard in Belgium; Auxiliary Support Vessel Rame Head was fully dismantled with over 95% of the vessel recycled.

This is the fifth ship successfully exported for recycling by the DSA in line with full Transfrontier Shipment of Waste regulations and the second consigned to Van Heyghen Recycling, all of which have complied with all International agreements and principles concerning environmentally sound management of waste. Van Heyghen Recycling successfully dismantled ex-HMS Fearless in

April 2009.

As well as generating income for the MOD, this sale also demonstrated the UK Government's commitment to responsible ship recycling. Ensuring that its vessels were recycled and recovered in accordance with UK Government and European waste management principles and overarching regulations.

The DSA's time and investment into the overall aims and intentions of the ship recycling strategy over the past 5 years, together with its close partnership with Industry ensured that this project was a resounding success.

Any future competition for the recycling of former Royal Navy vessels will be conducted in a similar fashion, to prevent uncontrolled and unregulated recycling of Royal Navy vessels in other parts of the world.





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