

A photograph of a Type 42 destroyer at sea, viewed from a side profile. The ship is grey and features several radar masts and domes. The number '0106' is visible on the hull. The background is a clear blue sky and the sea is a deep blue. A yellow vertical bar is on the left side of the image, and a grey horizontal bar is at the top right.

RECYCLING OF TYPE 42 DESTROYERS

Background



HMS Glasgow (D88) a [Type 42 destroyer](#) - built at [Swan Hunter Shipyard](#) in [Wallsend, Tyneside](#) and launched on 14 April 1976 by Lady Kirstie Treacher, wife of Admiral Sir John Treacher.

- Following on from the successful recycling of HMS Intrepid and HMS Fearless the next vessels to be officially declared for disposal were three Type 42 Destroyers, HMS Cardiff, Glasgow and Newcastle. The DSA conducted a tender exercise for the sale and recycling of these vessels in March 2008 and at this time media interest surrounding the disposal of surplus MOD vessels was still high. This was due to the incident in 2003 in which 4 decommissioned MARAD ships were transferred from the US to Able UK, Hartlepool without as it later became apparent, the necessary authorisations for recycling.
- Ship recycling continued to be a pan-government issue, and the publication of the UK Ship Recycling Strategy (SRS) in Feb 2007 continued to be the standard to which the DSA operated when conducting and evaluating its competitions.

Competition

- Tenders were limited to bidders from within the Organisation for Economic Co-Operation and Development (OECD) – as recommended by the SRS. The preparation of the vessel by the MOD's Disposal Reserve Ship Organisation (DRSO) again played a vital part in the process and a green passport, highlighting the hazardous material on board was produced for all three vessels, along with a Type 2 Asbestos survey. 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 Govt 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.
- Following the recommendations of the SRS, the DSA once more convened a Ship Recycling Evaluation Committee, involving representatives from Defra, MCA and MOD to assess the tender responses against the strict criteria called for in the Strategy. Each bidder was required to produce a detailed Ship Recycling Plan, which identified the dismantling methodology, sub-contractors, licences and permits, as well as comprehensive health and safety and environmental plans.
- The committee awarded Preferred bidder status to a Turkish company, Leyal Ship Recycling Ltd in July 2008. A formal contract was only awarded in October 2008 once the appropriate consents were obtained. The DSA made clear that this contract award only applied to one Ship Recycling yard in Turkey – and was not an indication that all Turkish facilities in Aliaga, would meet the stringent requirements of the UK SRS.

Recycling of Type 42's

An aerial photograph of a large ship, likely a Type 42 destroyer, being dismantled at sea. The ship is oriented vertically, with its bow at the top. The hull is white, and the superstructure is dark. The ship is surrounded by a large amount of debris, including metal scraps and structural components, which are scattered in the dark blue water. The background is a vast expanse of the ocean under a clear sky. The text of the slide is overlaid on the image, with a yellow background for the title and a dark blue background for the list items.

- The DSA continued to view each competition as a project in its own right. As with previous vessels, Leyal were required to provide monthly breakdowns 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 members of the DSA several times during the life of the project – involving a physical inspection of the yard in Aliaga, Turkey, 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 Turkish Authorities, ensuring that the company were adhering to all current H&S and Environmental legislation and the terms of their waste management permit.

The story in pictures..



Final Outturn

- At the start of the tender process a Green Passport was produced by the Royal Navy which identified the hazards contained within all three vessels. The final report produced by Leyal showed the vessels final outturn – which is compared against the estimate given in the green passport.

(All figures in Tonnes Per vessel)	Green Passport Estimate	Actual
Metal Steel	1992	2260
Non Ferrous Metal	200	137
Waste (plastics/rubber)	21	55
Asbestos	1	1
Resale equipment	0	15
TOTAL	2214	2468

- Using the waste hierarchy as a guide, the percentage of material that was recycled from the dismantling of HMS Cardiff, Glasgow and Newcastle is an impressive 97.73%.

Final Destination	Tonnes	%age of Total
Re-use	15	0.60%
Recycling	2397	97.13%
Waste (Landfill)	56	2.27%
TOTALS	2468	100%

Conclusion

- By July 2009, less than one year since their departure from HMNB Portsmouth to Turkey, all three Type 42 Destroyers were fully dismantled. 97.73% of the vessels were recycled.
- As well as generating income for the Crown – this project was able to demonstrate that for the first time a Turkish ship recycling yard was able to meet the high standards required in the UK SRS and demonstrated their commitment to responsible ship recycling. Leyal had clearly set the standard for the remaining ship yards in Aliaga, Turkey.
- The DSA worked closely with industry and various government departments over this period to ensure that the overall aims and intentions of the ship recycling strategy were implemented. It is clear that this project was a resounding success for the UK and proved that responsible ship recycling could be conducted outside of Europe.