



The Lucas logo, consisting of the word 'Lucas' in white, bold, sans-serif font on a green rectangular background. To the right of the text is a white stylized arrow pointing upwards and to the right.

## Case Study

Sector:	Defence
Customer:	Lucas Aerospace, now Collins Aerospace
Duration of supply:	3 years
Contract value:	£2.4 million
Investment:	£650k

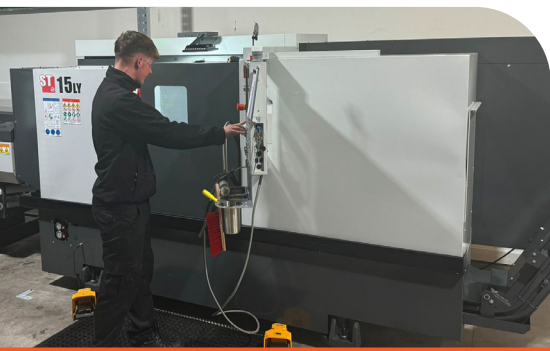
### Background

The Spearfish torpedo is the heavy torpedo used by the submarines of the Royal Navy. It can be guided by wire or by autonomous active or passive sonar, and provides both anti-submarine warfare (ASW) and anti-surface warfare (ASuW) capability. Spearfish development began in the 1970s, with production starting in 1988, and deployment in 1992. By 2004, the new weapon had completely replaced the older Tigerfish torpedo.

Collins Aerospace's Rockford facilities are experts in supplying torpedo power plants and afterbody components. Collins has provided full life-cycle support to the U.K. MoD's Spearfish heavyweight torpedo for 40 years. Collins has been a research and technology partner with the U.S. Navy for over 50 years to improve and supply their next generation lightweight and heavyweight torpedo systems.







## CNC investment

NEC, which continues the legacy of Newburgh Engineering, produced five of the eight hull sections that make up a Spearfish heavyweight Torpedo.

The company's investment included procurement of a CNC twin pallet horizontal machining centre, CNC vertical turning machine and CMM, co-ordinate measuring machine, in a temperature controlled environment.

NEC was processing a number of operations on these parts to assist our customer in getting back onto delivery program. Lucas Aerospace could not produce these parts to specification with their existing plant and were looking at the feasibility of investing in new facilities. NEC suggested that they set up a cell for manufacture of these parts; this would enable the customer to solve their problems without capital expenditure.

After producing a detailed cost model for the cell and identifying the correct machinery, equipment and processes we presented our proposal to the customer. A contract was negotiated which justified our investment and gave the customer guaranteed security of supply.



NEC brought deliveries back onto program and produced what the customer described as “the best hulls ever”.



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