

Working with Partners to Deliver Support Solutions for the SUV IPT

LSC Group has been successfully supporting the MoD's Specialist and Utility Vehicles (SUV) IPT for more than seven years on projects including Balter SUV, Supacat's HMT 400 and 600 series, Hagglund's BV10NLD ATVs and the WHEELBARROW replacement, CUTLASS. Through such projects, LSC Group has demonstrated its unyielding commitment to excellence in providing cost-effective support solutions.

HMT 600 Series TUH (HC) Project



Truck Utility Heavy (TUH) High Capacity (HC) is a variant of the HMT 600 (6x6) class of high-mobility vehicles that is being developed by Supacat Ltd. It is powered by a Cummins ISBe 5.9 litre turbocharged diesel engine. The TUH (HC) System is the proposed load bearer platform for the delivery of a range of battlefield communications capabilities.

In 2005, DML Group (Now Babcock Marine) appointed LSC Group to manage the development of the ILS programme to ensure that the vehicle and its support system were developed and designed for full supportability. In addition to this, we focused on ensuring that the required level of reliability could be achieved throughout the in-service life. We have been in close contact with the in-Service SME's to ensure that we meet the MoD requirements.

LSC Group met a number of goals to fulfil its obligations to the project. These included:

- Developing an Interim Support Package to ensure the Soothsayer Technical Insertion trials can be safely accomplished;
- Developing a cost-effective support package for the platform prior to Logistic Support Date (LSD), by carrying out ILS, including R&M Tasks, Reporting and Reviews in accordance with Def Stan 00-60 and Def Stan 00-40 as appropriate to enable Soothsayer Initial Operating Capability (IOC) to be declared on time

We have a clear understanding of the importance that each ILS element plays in transforming the operational requirement into a viable cost-effective solution. Although there were on-going design changes LSC Group has delivered an effective ILS programme.

HMT 400 Series

The HMT 400 Series, developed by Supacat Ltd, is a 4x4 vehicle capable of being configured to suit a variety of roles in direct support of land mobility operations.

In 2001, Supacat Ltd contracted LSC Group for the provision of Project Management and Logistics Management services. Our chosen ILS approach provided a responsive, through-life support solution resulting in a fully supportable cost-effective product that represented best value for money when measured against operational capability.

The Reliability and Maintainability data gathered during the HMT 400 Series development process and trials coupled with the use of the most advanced modelling techniques available were crucial in developing a credible and affordable support solution that met the customer requirements.

Balter Project



The Balter platform is a 6-wheeled all-wheel drive vehicle designed by Roush Technologies Ltd. The vehicle carries special-to-task payload boxes that can be powered by the vehicle's 24V electrical system.

In late 2001, LSC Group teamed up with Revolve Technologies and played a key role in the development of an optimised through-life support solution at a minimum Whole Life Cost (WLC). We delivered a comprehensive Integrated Logistic Support (ILS) programme for the Balter project that included adoption of a MS Access logistics database to record all essential supportability data during Logistics Support Analysis (LSA) tasks.

Other ILS activities included:

- Support for Design and Development Maintenance
- Logistic Planning Support
- Resource Identification
- Level of Repair Analysis (LORA)
- Reliability and Maintainability (R&M)
- Reliability Centred Maintenance (RCM)
- Support Equipment Identification
- Spares Provisioning
- Technical Documentation
- Trials Incident Sentencing
- Disposal planning

LSC Group also carried out support modelling activities and was responsible for the provision of Risk and Safety Management.

Using the MoD preferred Predict!® software for all risk assessment, demonstrates our on-going commitment to provide a project management capability that meets the MoD's requirements. Additionally, we adopt Def Stan 00-45's RCM principles for the derivation of an effective Preventative / Corrective maintenance strategy.

In providing an effective support solution, we were faced with tackling challenging design changes due to vehicle weight constraints, but remained agile enough to adapt to the changing support requirements.

LSC Group met the customer requirements and the Balter vehicle was introduced into service in 2005 and was adapted for use in different locations.

CUTLASS Project



In December 2006, Remotec UK Ltd (a subsidiary of Northrop Grumman Corporation) was awarded the Contract for the Development and Manufacture of the CUTLASS programme.

The CUTLASS programme will provide the next generation of unmanned ground vehicle for explosive ordnance disposal (EOD) to be used by the MoD for anti-terrorism operations worldwide. It will eventually replace the in-service WHEELBARROW Mark 8B, also manufactured by Remotec UK. CUTLASS will provide the MoD with a step change in capability via a U.G.V that is capable of adapting to new innovations in the world of bomb disposal.

The CUTLASS Support Contract was signed and awarded to LSC Group on 15 December 2006. The contract is for the provision of ILS, LSA, R&M and Risk Management support.

The Through Life Support effort is being managed by LSC Group with input from QinetiQ and various equipment suppliers. The support strategy will translate user availability, maintainability and requirements into cost-effective support solutions using a wide range of analysis, prediction and modelling tools and techniques.

Support levels are highly effective and successful project meetings have taken place where a number of key contract deliverables and milestones have been successfully delivered by LSC Group. Final delivery of the CUTLASS platform is scheduled for early 2011.

BvS10NLD Engine Project



As a result of successful provision of ILS support to Cummins Engine Company Ltd (CECL) for the BvS10 Viking vehicle engine in 2000, LSC Group were contracted by Cummins to provide ILS support for the BvS10NLD engine in early 2006.

The BvS10NLD, a Dutch Army derivative of the British Army Viking vehicle (BvS10), is a multi-purpose, all-terrain vehicle consisting of two tracked cars linked in series. The BvS10NLD is powered by a Cummins 5.9 litre diesel engine. To aid in the support of the engine a unique graphical Equipment Breakdown Structure was developed.

Using extensive LSA knowledge, LSC Group worked with Cummins to provide updated LSA data for the purpose of NATO Codification. This took the form of fully compliant Def Con 117 and Def Con 82 lists for Initial Spares Provisioning. LSC Group's expertise was invaluable supporting the customer requirements.