AJAX

The Future of Armoured Fighting Vehicles

GENERAL DYNAMICS
United Kingdom Limited

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AJAX – the future of Armoured Fighting Vehicles

AJAX represents the future of Armoured Fighting Vehicles (AFV) for the British Army, providing best-in-class protection and survivability, reliability and mobility and all-weather Intelligence, Surveillance, Target Acquisition and Recognition (ISTAR) capabilities. Its range of variants will allow the British Army to conduct sustained, expeditionary, full-spectrum and network-enabled operations with a reduced logistics footprint. AJAX can operate in combined-arms and multinational situations across a wide-range of future operating environments.

Each AJAX platform is designed for future growth. With an upper design limit of 42 tonnes of driveline capacity, scalable and open Electronic Architecture and a modular armour system, it has enormous potential to combat future threats and incorporate new technology throughout the lifespan of the platform.

The platforms, consisting of six variants, will be delivered to the British Army between 2017 and 2024, and will serve at the heart of the Armoured Infantry Brigade structure, providing essential capability to the Armoured Cavalry within Army 2020.

For information only:
The programme was originally known as the SCOUT Specialist Vehicle (SV) programme. It was renamed AJAX, along with new names for each variant, at DSEI in September 2015.

Replacing the British Army's existing force of Combat Vehicle Reconnaissance (tracked) vehicles, AJAX will provide nine different roles:

- reconnaissance; including ground-based surveillance and joint fire control specialist capabilities
- equipment and support repair; repairing and towing damaged vehicles
- equipment and support recovery; recovering damaged vehicles
- command and control; providing a mobile battlefield headquarters
- protected mobility reconnaissance support, including formation reconnaissance overwatch and engineer reconnaissance; delivering and supporting specialist troops across the battlefield
- engineer reconnaissance; carrying specialist engineering equipment and personnel.

AJAX – ISTAR on the move

AJAX will be the medium-weight core of the British Army's deployable Intelligence, Surveillance, Target Acquisition and Reconnaissance (ISTAR) capability. It will enable the soldier to be at the point of collection of accurate all-weather commander information within a network-enabled, fully-digitised platform.

The platform provides commanders with a survivable and capable Ground Mounted Manned Reconnaissance capability, which gives them the flexibility to perform a range of roles across the spectrum of conflict.

The primary role of AJAX is to provide accurate and timely information to support decision-making at all levels. It integrates a range of leading-edge technologies to provide an optimised survivable, lethal and agile ISTAR platform.

The panoramic Primary Sight provides advanced all-weather imaging technology capability, which allows the AJAX platform to find, engage and target enemy combatants at far greater ranges than current UK Ministry of Defence legacy platforms.

A sophisticated, packaged Electronic Architecture makes it the first fully-digitised land platform that is able to seamlessly integrate both current and future open ISTAR and communication products.

Enhanced and modular survivability technologies ensures it will survive both current and future threats.

Lethality is provided by the 40mm cannon integrated into a revolutionary, user-defined, fightable turret. Where the operation dictates, a fully-stabilised Remote Weapon System can replace the Primary Sight.

Capability

- Crew of three plus an option to carry a fourth person
- Panoramic Primary Sight
- 40mm stabilised cannon
- Modular armour
- Electronic Architecture
- High-performance power-pack
- Advanced torsion bar system
- Remote Weapon System (replaces Primary Sight)
- Auxiliary Power Unit

ARES

ARES will be used to deliver and support specialist troops across the battlefield to enable organic combined arms manoeuvre at the lowest tactical level, alongside AJAX-equipped troops.

In service, ARES will provide safe transportation of fully-equipped soldiers in a well-protected environment. On dismount, troops will be able to more effectively conduct a variety of tasks, such as dismounted surveillance (including patrols), observation posts and close target reconnaissance.

As with all other variants, it boasts fully-integrated sub-systems utilising its sophisticated Electronic Architecture.

Lethality is provided via a Remote Weapon System, which provides a self-defence capability that can be fired on the move, under armour. The Remote Weapon System is fitted as standard across all variants and it can replace the Primary Sight on the AJAX variant.

ARES also provides the Common Base Platform flexibility that can be adapted for other roles, such as Engineer Reconnaissance and Command and Control.

Capability

- Crew of two
- Four dismounts
- Remote Weapon System
- Modular armour
- Electronic Architecture
- High-performance power-pack
- Advanced torsion bar system
- Medium-weight jettisonable dozer blade
- Route Marking System

APOLLO

Apollo is one of two Equipment Support variants to be used in a complementary manner to deliver a coherent capability.

APOLLO will be used to tow battlefield damaged vehicles and lift heavy sub-assemblies. When required, it can tow a high-mobility trailer containing main assemblies, enabling battlefield repair tasks.

Its lifting capability allows full power-pack replacement and it has the unique ability to self-repair by changing its own power-pack.

Capability

- Crew of four
- Crane and stabilisation system
- Auxiliary Power Unit
- Remote Weapon System
- Modular armour
- Electronic Architecture
- High-performance power-pack
- Advanced torsion bar system
- Self-repair

ATLAS

ATLAS is one of two variants to be used in a complementary manner to deliver a coherent capability.

It is fitted with a recovery package that is optimised to provide the most effective means of recovering a casualty platform.

Capability

- Crew of three
- Earth anchor
- Two winches
- Remote Weapon System
- Modular armour
- Electronic Architecture
- High-performance power-pack

ARGUS

ARGUS is a specially-designed platform, based on the ARES variant, which has a primary role to provide the combined arms and engineer commanders with timely and accurate engineering information on the natural and manmade environment.

It is also expected to obtain relevant information about enemy engineering activities, intentions and terrain.

Capability

- Crew of two
- Engineer operator
- Gap and slope measurement
- Route Marking System
- Under Armour Demolition Detonation
- MAKEFAST BISA
- Front-end equipment
- Remote Weapon System
- Modular armour
- Electronic Architecture
- High-performance power-pack
- Advanced torsion bar system

ATHENA

ATHENA is a specially-designed platform, based on the ARES variant, which will process and manage information to provide decision support, in order to enable the delivery of rapid and synchronised effects in the joint, inter-agency and multinational situations.

It is fitted with modern, bespoke workstations that provide the ideal operating environment for users.

Capability

- Crew of two
- One watchkeeper
- Three operators (Staff Officer and two signallers)
- Modern, bespoke workstations
- Command furniture, including map boards
- Interfaced protected working environment
- Remote Weapon System
- Auxiliary Power Unit
- Modular armour
- Electronic Architecture
- High-performance power-pack
- Advanced torsion bar system

Technical facts

Enables

- The soldier to be at the point of information collection
- Accurate all-weather commander information within a network-enabled Intelligence, Surveillance, Target Acquisition and Recognition (ISTAR) capability

Delivers

- Modern, growth-enabled surveillance and target acquisition platforms, underpinning the Army 2020 formation construct for the next 30 years
- The first fully-digitised land platform, representing a step-change in flexible capability
- Best-in-class protection levels, with advanced surveillance and target acquisition, firepower, mobility and growth capabilities

Provides

- The medium-weight core of the British Army's deployable capability
- Commanders with flexible and capable Ground Mounted Manned Reconnaissance ISTAR capability
- Flexibility to continue to perform a range of other roles across the spectrum of conflict

Vehicle performance

- Gross vehicle rating of 42 tonne
- Two tonne of growth
- 810 HP engine with 6F/5R speed transmission
- Unrivalled protection in mission-specific armour configurations
- Fully-digitised Electronic Architecture (Generic Vehicle Architecture compliant)

AJAX – ISTAR on the move

Provides accurate and timely information to support decision-making at all levels. It integrates a range of leading-edge technologies to provide an optimised survivable, agile and lethal Intelligence, Surveillance, Target Acquisition and Recognition (ISTAR) platform.

- Crew of three plus one
- Fully-stabilised CTAI 40mm cannon
- Panoramic Primary Sight (ranges greater than current legacy fleet)

ARES

Provides safe transport of the modern, fully-equipped soldier in a well-protected environment.

- Crew of two
- Four passengers
- Remote Weapon System
- Jettisonable dozer blade

APOLLO

Provides the ability to tow battle-damaged vehicles and lift heavy sub-assemblies.

- Crew of four
- Five tonne crane capable of lifting its own power-pack
- Remote Weapon System

ATLAS

Provides an effective means of recovering a casualty vehicle.

- Crew of three
- Earth anchor
- 300Kn main winch
- 8Kn auxiliary winch
- Remote Weapon System

ARGUS

Provides Royal Engineers with advanced measuring devices without leaving the protection of the platform for counter-mobility tasks.

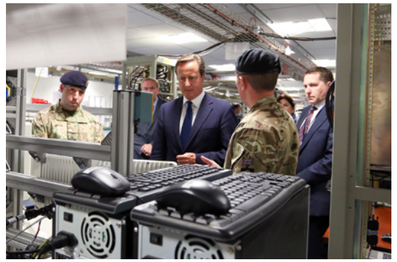
- Crew of two
- Four dismounts
- Remote Weapon System
- Jettisonable dozer blade
- Route Marking System

ATHENA

Provides battlefield headquarters on the move, with enhanced information processing capability.

- Crew of five
- Auxiliary Power Unit
- Remote Weapon System

Prime Minister David Cameron announces £3.5 billion SCOUT Specialist Vehicle (SV) manufacturing contract



On 3 September 2014, Prime Minister David Cameron visited General Dynamics UK to announce the Company will deliver 589 SCOUT SV platforms to the British Army

The Prime Minister was joined by the Rt Hon Michael Fallon MP, Secretary of State for Defence, Philip Dunne MP, Minister for Defence Equipment, Support and Technology, and General Sir Peter Wall, Chief of the General Staff

Senior General Dynamics representatives, including Phebe Novakovic, Chairman and Chief Executive Officer of General Dynamics Corporation, attended to hear the Prime Minister make the announcement

Prime Minister David Cameron addresses General Dynamics UK employees after announcing the 10-year SCOUT SV manufacturing contract

SCOUT SV takes centre stage at the NATO Summit 2014

During the NATO Summit on 4 and 5 September 2014, General Dynamics UK demonstrated the cutting-edge capability that will be delivered by SCOUT SV

General Dynamics showcased its extensive capabilities inside the Celtic Manor, Newport, including SCOUT SV

NATO delegations were interested in learning more about the new platform that will see service with the British Army

The first pre-production prototype, a Protected Mobility Reconnaissance Support variant (ARES), was showcased at the NATO Summit at the Celtic Manor, Newport in September 2014

SCOUT SV sub-contracts signed with major suppliers

LOCKHEED MARTIN

Lockheed Martin UK will deliver 245 turrets for SCOUT SV

THALES

Thales will supply Sighting Systems and Ancillary Equipment for SCOUT SV

GE Intelligent Platforms

GE Intelligent Platforms will deliver embedded computing sub-systems for the SCOUT SV fleet

Kevin Connell, Vice President at General Dynamics Land Systems – UK, and Victor Chavez, Chief Executive of Thales UK, sign the contract award at Thales on 30 July 2015

First SCOUT SV prototype undertaking rigorous trials

At the beginning of June 2015, the first SCOUT SV prototype, a Protected Mobility Reconnaissance Support variant, began its formal Verification and Validation trials

The platform is currently in the middle of Operational and Tactical (O&T) mobility trials. These O&T trials demonstrate the vehicles ability to withstand extreme temperatures and to meet the demanding mobility requirements of the SCOUT SV programme

The platform will be shipped to the UK for further trials later this year

The first SCOUT SV prototype, a PMRS variant, undertaking trials in Seville, Spain

HRH The Prince of Wales visits General Dynamics UK

In July 2015, General Dynamics UK welcomed His Royal Highness The Prince of Wales to its facility in Oakdale. His Royal Highness was given a tour of the SCOUT SV area, where the next generation of Armoured Fighting Vehicles are being developed

Prince Charles unveiled a plaque to mark the commissioning of the SCOUT Crewstation Assessment Rig, before addressing all General Dynamics UK employees

Prince Charles learns more about the vehicle's sophisticated Electronic Architecture

During his visit, Prince Charles said: "Today's visit has been a wonderful demonstration of the best of British engineering. This country has an extraordinary reputation in producing the most remarkable engineering talent"

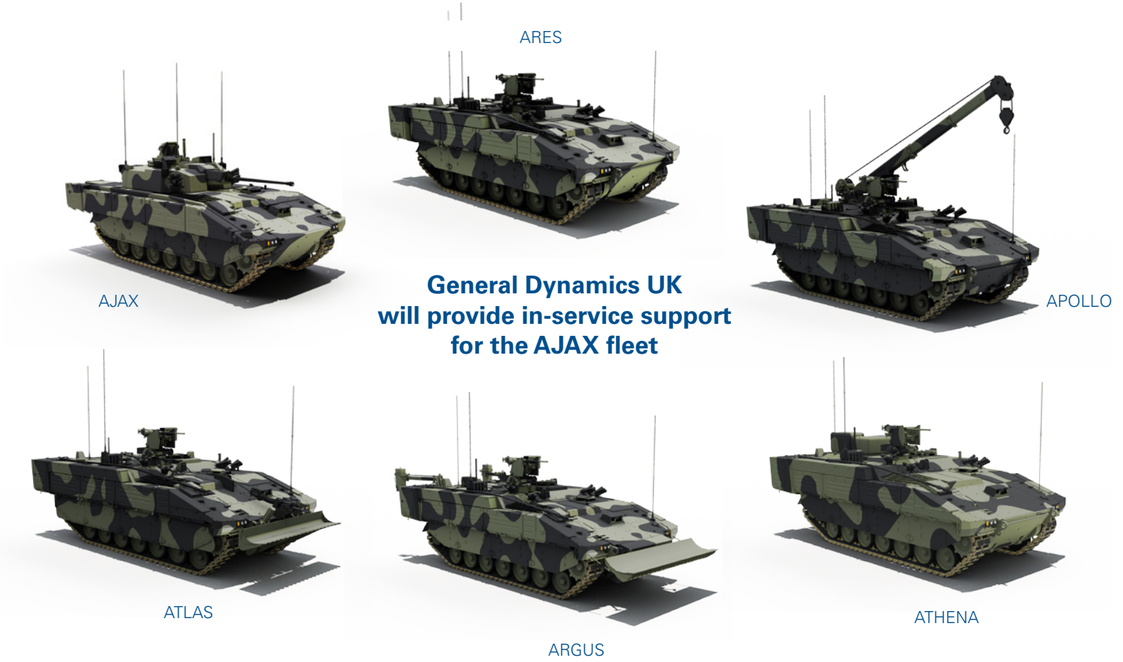
£390 million SCOUT SV support contract and new UK industrial capability

On 23 July 2015, General Dynamics UK was awarded a £390 million contract by the UK Ministry of Defence to provide in-service support for the SCOUT SV fleet until 2024

General Dynamics UK also announced it will open a new Armoured Fighting Vehicle Assembly, Integration and Testing (AIT) facility in South Wales

With this facility investment, General Dynamics UK will undertake the AIT of 489 SCOUT SV platforms. The first 100 platforms will undergo AIT at General Dynamics European Land Systems' facility in Seville, Spain

The investment by General Dynamics UK in a new AIT industrial capability is reaffirmation of the UK's proud history of developing and manufacturing AFVs



Supporting the UK economy

This programme secures not only the UK's sovereign AFV expertise, but it safeguards or creates around 2,650 jobs across more than 160 UK-based companies.

- **Scotland and Northern Ireland** – 149 jobs
- **North and North East** – 66 jobs
- **North West** – 145 jobs
- **East Midlands** – 1,138 jobs
- **Wales** – 622 jobs
- **West Midlands** – 46 jobs
- **East Anglia, London and the South East** – 22 jobs
- **South** – 398 jobs
- **South West** – 71 jobs

AJAX

The **Future** of **Armoured Fighting Vehicles** for the **British Army**

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