

# New Armored Vehicles Debut At British Equipment Exhibition

by Peter Brown

Britain's Royal Navy and British Army Equipment Exhibition, a major showcase of Britain's ground armaments industry, takes place every two years. Most recent events have been combined with the naval side, which is not as strange an idea as might first sight appear. Many companies in the helicopter, electronics, and missile fields produce equipment for both seaborne and land use. The land side of the 1997 event was held at a new location at Farnborough airfield. There was no mobility component, as seen at previous shows at Pegasus Village near Aldershot.

Despite this, there was a wide range of equipment on display. One innovation was a large static area with a variety of current equipment, with items ranging from Challenger 2 through Saxon and Sabre, all available for inspection with serving crews on hand to point out their good points.

There were some new armored vehicles in the main part of the display. No new main battle tanks were on show, but the UK's main producer, Vickers Defence Systems, had a Challenger 2 on static display on one of its bridges. Next to it, and demonstrated each day, was the full BR90 Automotive Bridge Launching Equipment being laid and recovered.

Among new light vehicles, Alvis exhibited Stormer 30, the armored reconnaissance/light tank variant of their Stormer family, which is itself an outgrowth of the proven Scorpion CVR(T) series. Although larger than Scorpion, Stormer 30 is fully air-portable. Fitted with spaced aluminum armor and good optical equipment, its stabilized 30mm Bushmaster dual-feed cannon and turret-mounted TOW missile launchers give its three-man crew sufficient firepower to act in a light force recon or holding role until heavier forces deploy. Capable of speeds ranging from 4 km/h up to 80 km/h, forward or backwards, it may prove to be a worthy successor to Alvis' earlier designs.



*The Alvis Stormer 30*

- Author's Photos

Equally useful would be the bridge layer variant. Using Stormer reduced to its most basic form, it carries a folding bridge capable of carrying MLC30 traffic across a 15 meter gap, which can be bridged in 5 minutes. It will carry all military traffic other than MBTs, allowing movement across a high proportion of wet or dry obstacles.

Its major advantage is that a bridge and its launcher can be carried by C130 or equivalent, offering units with light tanks or APCs the same mobility enhancement currently enjoyed only by those equipped with heavier AVLB systems.

A vehicle which may not need the bridge is Alvis' Scarab. For all its small size, it is well protected, being able to resist an RPG-7 rocket across its frontal arc and .50 caliber heavy machine gun fire all round. In addition, it has built-in mine resistance which many heavier vehicles would envy.

Carrying up to four crewmen, it can carry a wide range of weapons for missions from liaison, escort, and scouting up to antitank or antiaircraft support. Its larger cousin, Alvis 4, is

perhaps a little less well protected but still offers good protection and has seen service in Bosnia.

One other new light vehicle comes from GKN. A contender for the TRACER scout program, for which GKN has teamed with GEC Marconi and American partners United Defense and Raytheon, it is based on the well-proven Warrior MICV chassis. The vehicle on show carried full additional armor and a turret fitted with a 25mm cannon and TOW missiles, giving it protection and firepower to match its mobility. Its three-man crew is equally well-equipped to observe; a Clark Masts telescopic mount carries RACAL's MSTAR radar and a RADAMEC electro-optical surveillance system, which feed into a Delco INIS information management system.

Other Warrior versions were also on show, one mounted an American Delco turret with a 30mm cannon in place of the 25mm type fitted to the Desert Warrior now in service in Kuwait. The Utility Vehicle carries a one-man machine



*Alvis Bridgelayer on Stormer Chassis*

gun turret for uses such as mortar carrier, command and communications or cargo-carrying.

GKN offered a wide range of wheeled vehicles. Their *Tactica* series, with a normal driver's cab layout, was configured in mock-up MOD Police markings, and a higher capacity version with cab-forward format was on display alongside a *Simba* in anti-riot form, fitted with folding side shields. At the heavier end of the scale is the *Piranha* designed by MOWAG of Switzerland, which GKN has a license agreement to build. This very versatile vehicle comes in 4x4, 6x6, 8x8 and even 10x10 configurations. Available for inspection was an 8x8 infantry fighting vehicle in two formats, one mounting a Delco turret with 25mm cannon and TOW not unlike those in use by the U.S. Marine Corps,



*Alvis Scarab*

terior. In service, it would soon fill up with a variety of equipment, as well as up to 11 crewmen.

More international cooperation was evident on the British Aerospace stand, with the 120AMS armored mortar system turret on a stretched M113 chassis. Developed in collaboration with Delco Defense, this effective system is already in service on a *Piranha* chassis. It offers powerful support from a wide range of 120mm mortar projectiles out to over 9km, all of which can be delivered under full armor protection.

Also shown by BAE was the *Shorland S600* armored carrier, developed by Shorts Brothers of Northern Ireland. It is now marketed by British Aerospace Australia and Mercedes-Benz. Based on the proven *Unimog* chassis, it can be fitted out for a variety of tasks and has been offered as a contender for an Australian requirement.

Finally, but not least of the new armor at the show, was *Panther*, marketed by Greys Defence Systems. Optimized for scout roles, this sleek vehicle takes advantage of the latest technology. Fully amphibious without preparation, its rear engine layout leaves the central section clear to carry a variety of equipment, from a machine gun to antitank or anti-aircraft missiles. Alternately, a crew of up to six can operate electronic and optical surveillance equipment under full armor protection.

Developing anti-armor systems were on view as well as armor, including *TRIGAT* in its MR infan-

try version and LR vehicle- and helicopter-carried versions. Already a strong contender for adoption by Britain, France, and Germany, interest has also come from Norway and Finland. Alongside missiles and launchers was the result of a very effective test firing showing residual penetration of 1,193mm, making this a system to be reckoned with — or avoided, depending on your viewpoint.

A lighter system is the next generation of light anti-armor weapon from Matra BAe Dynamics, teamed with Lockheed Martin. Designed to offer infantry anti-armor capability out to 600m, it would weigh under 10kg and be less than a meter long. Being able to be launched from confined spaces also extends its versatility. The computerized demonstration on show was, to say the least, spectacular.

Even with recent and continuing changes in the world, there is still a need for well-equipped armed forces using armored vehicles. This showcase showed that Britain's defense industry, increasingly in partnership with overseas companies, is well-placed to provide a range of equipment for these forces.

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*MOWAG Piranha III - 8x8 Version*

Canadian, and Australian armies, and the Saudi Arabian National Guard. The more recent version *Piranha III* offers an all-electric drive turret and improved crew and other facilities.

Premiered at the event was the ARGE/GKN proposal for the future family of wheeled utility vehicles to meet British, French, and German needs. The concept shown is a collaboration between GKN and Krauss-Maffei, MaK/Rheinmetall and Wegmann from Germany. Such a partnership should mean the final vehicle will be able to draw on a variety of skills to fit it for many different roles.

Another contender for this program was at the Vickers display, coming from TEAM International, comprising Britain's Vickers and Alvis alongside Henschell and KUKA in Germany and France's Panhard. Its descriptive literature is in three languages, while two serving soldiers who inspected the vehicle at the same time as this author were very impressed with the very roomy in-



*Greys Defence Panther*