

Dutch and Germans Agree to Build “Fennek” Light Reconnaissance Vehicle



The “Fennek” (Desert Fox) reconnaissance vehicle carries a three-member scouting team equipped with mast-mounted FLIR, TV camera and laser rangefinder, powerful radios, and storage for enough supplies to sustain a 5-day mission.

— Mildata photos



by Gerard van Oosbree

An unusual wheeled armored vehicle suitable for scouting, security missions, and liaison is being developed in Europe for the German and Dutch armed forces. Two European firms, Wegmann and SP Aerospace, produced test models and are now refining the design based on the tests.

The Fennek is a fully armored, wheeled vehicle with a crew of three (driver, observer and commander). Both the Dutch and German armies tested two prototypes apiece during 1998 and from that a fifth prototype is now being built with all the changes deemed necessary after the tests. The new vehicle will be 5cm wider and will have a different armor design. Testing is scheduled for 1999 with the first production vehicle to be delivered in December 2001.

The Fennek is a little bigger than a HMMWV at 5.71 meters length, 2.49 meters wide, and with a height of 1.79 meters, it is about an inch lower. Because it is an armored vehicle, it weighs a hefty 10 tons. Its armor-clad aluminum monocoque hull protects against 7.62mm armor-piercing rounds, artillery fragments, and anti-personnel mines. But it can still outrun the HMMWV on paved roads with a top speed of 115 kph/71 mph. Big, run-flat, off-road tires are fitted, with a central tire inflation system (CTIS) to guarantee mobility in the field. The Fennek can negotiate a 60 percent forward

slope and a 35 percent side slope and can ford to a depth of one meter.

The Fennek has enough space to carry supplies to sustain its crew for five days in the field.

Stealth has been built into the vehicle as well. The hull was shaped to reduce radar reflection, and to reduce the exhaust heat signature, the exhausts are placed low in the rear of the Fennek and the hot exhaust fumes are ducted to cool them.

The large armored windshields can be covered by a special mesh that reduces glinting reflections when the vehicle is stationary, but doesn't interfere with the crew's ability to look out.

The driver, who sits well up front in the middle of the vehicle, has an unobstructed view of more than 180 degrees. A rearward-facing video camera with a monitor in the dashboard helps the driver reverse the vehicle without ground guidance from the other two crewmen.

The observer and commander both sit in the middle of the vehicle, with room between them for equipment. Both have revolving turrets. The commander's can be armed with anything from a machine-gun to a 40mm grenade launcher. This weapon station is also equipped with smoke grenade launchers and can be remotely operated from within the Fennek.

The controls for the mast-mounted observation equipment, and also the navigation unit in German vehicles, is mounted on a rail that runs along the roof in front of the seats. This way, either crewman

can operate them by simply sliding it in front of him and locking the mount.

Using a mast mount for the observation equipment allows the vehicle to stay hidden while still retaining the ability to observe a target. The present design for the Dutch and German armies allows for the masthead to be tripod-mounted so it can be used away from the vehicle. This masthead carries a CCD camera, laser rangefinder, and thermal imager.

The Fennek is optimized for stealthy reconnaissance, unlike the Future Scout and Cavalry System, which has to be capable of both stealth and the ability to fight for information. The Fennek is not large enough to carry dismounts. It is more in the nature of a scout car, similar to the Swiss MOWAG Eagle (an armored version of the HMMWV), the French VBL, and the British Scarab.

The Dutch Army will acquire 218 Fenneks and the German Army 164.

Gerard van Oosbree is a Dutch photographer and writer specializing in military matters. He works freelance (Mildata Defence Images) as well as being European Correspondent for the *Journal of Military Ordnance* published by Darlington Productions in the USA. You can see his work at www.gironet.nl/home/mildata. His Email address is mildata@gironet.nl.