

News Brief

Ernest Konschel: Inventor of Early Mine Clearance Vehicles

After the death of a relative by a landmine in 1974 during the Rhodesian Bush War, Ernest Konschel, a self-employed electrical and mechanical engineer, took an interest in how to minimize damage and fatalities from landmine incidents. During that time, use of anti-tank and anti-vehicle mines was widespread in Rhodesia (now called Zimbabwe). During that time there was widespread use in Rhodesia of anti-tank and anti-vehicle mines. To combat the problem, Konschel began designing a series of mono-coque mine-resistant and mine-clearing vehicles.¹

His research resulted in a prototype for the Leopard, and the Rhodesian army and Konschel contracted with Trevor Davies Engineering to manufacture and produce it commercially. The Leopard was a vehicle with a V-shaped hull and was the forerunner for many mine-resistant vehicles developed and employed in southern and central Africa. Positioning the capsule 500 mm (20 in) above ground, the Leopard was designed to prevent the possibility of a focused landmine blast directly under the vehicle. A total of 800 Leopards were manufactured. The model encountered landmines 67 times; one landmine fatality and 41 injuries were recorded.² After continually modifying the design, Konschel created the Cougar prototype, replacing the Leopard.

Konschel then created the prototype for the Pookie in 1976, and Trevor Davies Engineering gained the intellectual property rights and the contract to produce it. The Pookie could drive over a buried landmine without detonation. Milton detecting pans were mounted under the center of the vehicle to reduce vibrations in the detecting pans that would set off false alarms. This design allowed the Pookie to detect mines while moving at speeds of up to 50 mph (80 kph) ahead of convoys. By keeping ahead of the convoys at these speeds, the crew traveling in the Pookie could exit the vehicle and remove or detonate the landmine far ahead of the convoys, ensuring that the convoys could continue moving at a safe distance and efficient pace.³ In four years of service, the Pookie found and cleared an estimated 550 landmines with no accidental detonations.²

Now 85, Konschel and his wife live with their daughter Beverly Loyson in Australia, where they moved in 2006 to be near their two children.⁴ 

See endnotes page 75~ Paige Ober, CISR staff



Ernest Konschel.
Photo courtesy of Beverly Loyson.

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1. "Leopard – Land Mine Resisting Vehicle." <http://bit.ly/10cwWaq>. Accessed 16 January 2013.
2. Hoffman, Jennifer, Jennifer M. Taw and David Arnold. "Lessons for Contingency Counterinsurgencies: The Rhodesian Experience." Rand, 1991. <http://1.usa.gov/W0AOIn>. Accessed 16 January 2013.
3. Wood, J.R.T. "The Pookie: A History of the World's First Successful Landmine Detector Carrier." <http://bit.ly/cbqtya>. Accessed 16 January 2013.
4. "Elderly South Africa Couple Granted Leave to Remain in Australia." Global Visas. <http://bit.ly/13DZ9Xq>. Accessed 16 January 2013.