

Kubota engines are the driving force behind Israel's "Avantguard" Unmanned Ground Combat Vehicles with their 7.62 mm machine-guns.

These remote-controlled robotic killing machines have infra-red, thermal-imaging cameras to target their weapons at night.



Kubota Corp.

Canada Pension Plan Investments

2012 shares = \$13 million
(Direct & indirect investments)

2011 shares = \$13 million
(Direct investments only)

This Japanese company is the world's largest manufacturer of compact diesel engines. Kubota is also a leading producer of tractors and construction equipment and has annual revenues of US\$12 billion.

Established in 1890, Kubota supplied Japan's military during its war with Russia (1904-1905). Then, during the 1930s, with Japan's invasion and occupation of Manchuria, and its domination by military and industrial elites "[w]ar was once again good for heavy-industrial producers such as Kubota. Now producing engines as well as pipes and machine tools, the company benefited handsomely from the war effort."

Kubota's engines are now used in two kinds of vehicles supporting Israel's occupation of Palestinian land:

- Remote-controlled robotic all-terrain military vehicles used by Israel's armed forces, and
- Heavy construction equipment used to build military checkpoints and settlement infrastructure in the occupied territories.

Robotic Military Vehicles

Kubota engines are the driving force behind an Unmanned Ground Combat Vehicle (UGCV) called the "Avantguard." These armed robotic all-terrain vehicles are used by Israel's military. Powered by Kubota's four-cylinder, 100 horsepower, V3800DI-T turbo-diesel engines, these remote-controlled vehicles are manufactured by an Israeli company called G-NIUS Unmanned Ground Systems. G-NIUS is jointly-owned by Israel's two largest war industries:

- Elbit Systems (See previous issue, pp.28-29.)
- Israel Aerospace Industries (See previous issue, p.48.)

Delivered to the Israeli Army in June 2010, the "AvantGuard," is designed to use Elbit-made "Overhead Remotely Operated Weapon Stations." These weapons turrets are also used on various Israel tanks, jeeps and armoured personnel carriers. They fire 7.62 mm caliber machine guns, and use an electro-optical/infra-red, thermal-imaging camera to perform weapons sighting, tracking and targeting functions at night.

G-NIUS states that this robotic vehicle "is effectively deployed in a variety of combat missions, including: Advance Guard, Armed Sentry [and] Combat Logistic Support."

Interestingly, the "AvantGuard" is based on the "Wolverine" tracked vehicle, a Tactical Amphibious Ground Support platform designed by a Canadian company called Dumur Industries.

John Pike, director of GlobalSecurity.org, said of "Guardium," a similar unmanned ground vehicle produced by G-NIUS, noted that

"Robots like this are potentially the future of ground warfare.... A robot does what it's told,... [t]hey don't have fear, and they kill without compunction."

(For more on G-NIUS robotic vehicles, see "Texas Instruments," pp.39-40.)

Construction Equipment

Kubota supplies the engines of choice in a wide variety of heavy construction vehicles made by Bobcat, a subsidiary of Doosan. (See previous issue, p.26.)

The "Who Profits from the occupation" database, published by Israel's Coalition of Women for Peace, notes that Bobcat machinery is "used for the construction of checkpoints and settlement infrastructure in the West Bank." "Who Profits" has photos of two Bobcat loaders in which model numbers S220 and S130 are visible. Bobcat's website reveals that these models are powered by liquid-cooled Kubota diesel engines. The S220 Bobcats are driven by 75 hp (56 kW) Kubota engines, while the S130s have Kubota's 46 hp (34.3 kW) engines.

Another photo of a Bobcat loader being used in the occupied territories is online thanks to the UK-based group, "Corporate Watch." This organization describes its efforts as "Tracking Corporate Complicity in the Occupation of Palestine." A March-2010 blog on its site shows a Bobcat

loader in Katzerin, “a settlement of 6,444 people situated in the occupied Golan Height[s].” Katzerin, it says, “was established on the land of the Syrian area of Fakhura.” The Bobcat vehicle which is shown at work in this town, is easily identified as an S150 loader. This model is also listed in Bobcat’s catalogue as using a Kubota-made diesel engine. In fact, of the 18 varieties of loaders in Bobcat’s catalogue, every one uses a Kubota engine.

The Kubota Engine Division’s website lists one service representative in Israel, F.K.Generators and Equipment Ltd. It’s customers includes Israel’s Ministry of Defence, Bezeq, Tadiran Electronic Systems (owned by Elbit Systems) and state-owned Israeli weapons-maker, Rafael. (See previous issue, pp.11, 28-29 and 49.) Also on Kubota’s client list are Leumi Le’Israel and Paz Oil (See pp.13-14 and 30.)

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Leumi Le’Israel

Canada Pension Plan Investments

2012 shares = \$9 million
(Direct & indirect investments)

2011 shares = \$11 million
(Direct investments only)

Leumi Le’Israel, the “National Bank of Israel,” has its origins in the “Jewish Colonial Trust” and the “Anglo-Palestine Company.” Founded in the UK in 1899, as “the financial instrument of the Zionist Organization,” Leumi is now Israel’s largest bank. After Israel’s 1983 financial crisis, when bankers illegally manipulated stock prices, Israel’s government took over Leumi. Also nationalized were Hapoalim and Israel Discount Bank. (See previous issue, p.10 and this issue, pp.8-9.) The state is still Leumi’s top shareholder, with 11.4% of its stock.

Leumi has financed Israeli war industries like TAT and Imagesat.

TAT Technologies (TAT)

Leumi and its US subsidiary loaned \$12 million to TAT which makes cooling systems for military land and airborne applications, systems for military shelters and battle vehicles, fuel systems for F-16s and heat exchangers for F-15s and F-16s. Israel has received hundreds of these two varieties of US warplanes.

TAT’s customers include some of the world’s top war industries, like Boeing, EADS, Safran and Thales, as well as Honeywell and Lockheed Martin (see previous issue, p.39, and this issue, pp.15-16.) TAT’s website also lists the Israeli Air Force, the US Navy, Elbit and Rafael, as customers. (See previous issue, pp.28-29 and 48-49.)

In 2009, Bank Leumi loaned US\$1.3 million to finance TAT’s purchase of Bental Industries. This Israeli firm makes motors for “electric turret and gun control systems” used in Israel’s Merkava MK4 tank and other armoured vehicles. It also makes motion technologies for missiles, drone aircraft and jet engines. Besides being “a major supplier” to the Israel Defense Forces, Bental’s customers include Israel’s top war contractors: Elbit, Israel



Leumi has financed Israeli war industries such as TAT Technologies, which makes components for weapons used by Israel’s military, and Imagesat which provides military-intelligence services.



Aerospace Industries (IAI) and Rafael.

Imagesat International

Leumi gave Imagesat a credit agreement “to finance up to \$70 million for the development of its EROS observation satellites.” Imagesat is a subsidiary of IAI, but is partly owned by Elbit. Thanks to Imagesat the

“Ministry of Defense in Israel presently receives intelligence services from three Israeli imaging satellites: the two Eros satellites and the military satellite, Ofek 5.”

Investments, Loans & Services

Leumi subsidiary, Leumi Partners Ltd., is the bank’s corporate investment arm, specializing in non-banking companies and funds in Israel. It has encouraged investors to buy stocks in top Israeli