Guns, grenades and deals

ST Engineering and its subsidiary ST Kinetics are making waves in the field of defence. ANSLEY NG reports

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by Ansley Ng

AT the end of Rifle Range Road in Bukit Timah lies a protected facility in a forest where monkeys move around much more freely than humans.

Long-tailed macaques climb onto trees, moving in and out of the compound, while the people who work here deposit mobile phones and cigarette lighters in lockers and walk through metal detectors even when they leave.

After lunch, some workers emerge from the facility to have a smoke while they sit by the kerb - or return SMSes they have missed all morning, if they could get a signal through the foliage at all.

Mobile phones are not allowed in the facility in case outgoing signals set off explosives. Instead, top executives are issued pagers.

Auxiliary security guards here are also of a more hawkish breed, not sparing even familiar faces any security formalities.

Welcome to the office of the Advanced Material Engineering, the munitions-making facility of ST Kinetics that provides ammunition to the Singapore Armed Forces (SAF) and many other armies around the world.

Bombs away

In one air-conditioned single-storey building - dubbed the "Fuze Assembly Plant" - a dozen gleaming machines kept in clear plastic tanks do most of the work of making fuses for the 40mm grenade, one of the best-selling products of ST Kinetics, the land weapons arm of public-listed ST Engineering.

As uniform-clad technicians check readings on computer screens, the noisy machines are a dizzying mess of cables and moving metallic parts, spinning and jabbing to install tiny copper and steel parts onto the fuses.

In another building nearby, components like propellant and explosives will be added to the grenades. The facility can make 6,000 grenades a day.

Fifteen years ago, all these fuses were made by hand. Today, computers and mechanisation have cut the manpower needs by two-thirds, thus cutting down the risk of human error. After all, precision is needed to make bombs with guaranteed detonation.

Mr Patrick Choy, ST Kinetics' salesman-in-chief, recalled speaking to a group of British Marines who had served in Afghanistan.

The Britons complained that some of their South African and Korean 40mm rounds did not explode, forcing some of the soldiers to resort to hand-to-hand combat. The blinds - faulty ammunition that do not detonate on impact - also made the environment dangerous for the locals.

"We went there and said 'try our ammo'," said Mr Choy, director of Kinetics Marketing Group.

"Over the last two to three years, we have been a major supplier (of 40mm rounds) to the UK."

The company's engineers have since created many more versions of the 40mm round, such as a self-destructive version for use in places with soft ground like snow and one that could be fitted with a camera and a mini-parachute for surveillance use.

The 40mm round could even be developed in future for non-military use - such as fitting them with fire retardant so that they could be accurately fired into the windows of burning...
houses, said Mr Choy, who is also ST Engineering's executive vice-president for international marketing.

Weapon of choice
"You know you are a market leader when you go to Toys R Us and you see your (gun) model sold there," Mr Chan Beng An, a senior marketing manager at ST Kinetics, told this reporter in jest during a factory visit.

But while none of its guns have been turned plastic for kids just yet - unlike the M16 or AK47 - the SAR21, standard issue rifle of the SAF made by ST Kinetics, has many adult fans.

At its Jalan Boon Lay factory, a group of suit-clad African men could be seen touring the facility, examining weapons.

In one room, four staff members work together to assemble one SAR21 every eight minutes.

One welds the near-unbreakable plastic rifle butt together, while another two fit the rifle body with the firing mechanism and barrel. Yet another takes the finished rifle and "zeros" it on the spot, making the gun-sights good for immediate use.

While Mr Choy, a retired brigadier-general in an armour unit, was tight-lipped about production figures, he said the SAR21 has been sold to 15 countries, as far away as Africa and Latin America.

Apart from the SAR21 and the popular Ultimax100 light machine gun, the 40mm automatic grenade launcher is the company's "star product", said Mr Derrick Chew, who oversees the SAR21 plant.

Its engineers are also constantly improving the company’s defence products. There is now a sub-3kg version of the SAR21 vying for a contract with the Indian army.

And it has high hopes on its next big thing: The Compact Personal Weapon, a light and handy 9mm calibre submachine gun that could be used by tactical forces for fighting in urban and compact spaces.

As countries buy more arms than ever, Singapore is there to fill the gap with its brand of innovation and value-added service.

According to a military think tank Stockholm International Peace Research Institute (SIPRI), global arms expenditure jumped 11 per cent to US$1.5 trillion ($2 trillion) in 2008 from a year before.

In 2007, among the 100 top defence firms of the world, ST Engineering had a 0.3 per cent share of the pie, more than those from countries like Australia, Norway and Switzerland, which had 0.2 per cent each. The US took top spot, splitting 61.2 per cent between its 44 defence firms.

With big spenders like the US and UK still bogged down by wars in Afghanistan and Iraq, reliable armoured carriers that can be used in rugged terrain in these countries are very much in demand.

In 2008, ST Engineering won a$330 million contract to supply the British army with over 100 Warthogs - a customised version of the local Bronco All Terrain Tracked Carrier - for use in Afghanistan.

Rules of engagement
The world of weapons sales observes the same rules of engagement as the corporate jungle.

Companies fight for defence dollars by improving on products, cutting price or throwing in sweeteners, like snazzy electronics to go with armoured vehicles.

"The ultimate plan for any defence firm is to be a systems integrator," said defence economics expert Adrian Kuah of the S Rajaratnam School of International Studies (RSIS).
"They sit up there and assimilate and incorporate technologies for governments."

But while it deals only with governments, there are some states ST Engineering doesn't sell arms to, such as Iran and North Korea.

"Singapore is an international citizen with a clear idea of what we do. We follow United Nations regulations," Mr Choy said.
International laws aside, image is a big consideration, because - like oil firms - arms companies are easy to dislike.

Citing one example, Mr Choy said Singapore does not sell guns to the Somalian government. "The guns might end up with the pirates, and the world will condemn Singapore for selling guns."

When asked to comment on rumours that ST Engineering had sold arms to Myanmar, he said: "We don't deal with Myanmar and we don't sell to Myanmar.

"The world of defence is very interesting. Sometimes people do things to discredit you because it's part of the business," Mr Choy added.

But with so many of the made-in-Singapore weapons sold overseas - some to governments where corrupt military officers have become gun runners themselves - is there a danger of an SAR21 landing in the hands of terrorists or rogue nations?

While Singapore will never sell arms to non-government buyers, there are groups of individuals prepared to help such buyers in return for huge sums of money.

One local defence consultant, who declined to be named, said while arms exporting countries usually have a blacklist of countries they don't deal with, weapons can be diverted right after they leave the sellers' hands.

For example, end-user certificates - records stating each weapon's serial number and generated by the buyer-country and given to the seller for weapons to be exported - could always be forged.

If there were any Singapore-made weapons in the hands of terrorists or rogue nations, RSIS' terror expert Professor Rohan Gunaratna said it was more likely to be the work of freelance arms dealers and corrupt military officials in other countries which divert arms to and from rogue partners.

"Singapore has more rules and regulations than the US and European countries and the process of verification (of weapon sales) are much more stringent," he said. "It's a Singapore culture of checking and rechecking."

"Leakages of weapons are a reality of the situation. That's why Singapore should make sure that as it becomes a leading producer of arms and ammunition, it must ensure there are no leakages to third parties," Prof Gunaratna said.

Several Singaporeans have been arrested overseas for trying to sell arms illegally to countries like Syria, providing them with not just weapons, but also equipment like night vision goggles and aircraft radars.

Last December, Singaporean Balldev Naidu Ragavan was extradited to the US on charges for conspiring with another Singaporean, Haniffa Osman, to provide Tamil Tigers with arms. Haniffa has been jailed for 37 months by a US court.

While arms dealers like Haniffa do not need to juggle morality with profits from arms sales, how about established companies such as ST Engineering?

After all, defence companies are sometimes described as "merchants of death". "The defence business is about defending and protecting innocent lives," said Mr Choy. "A country should be able to defend itself against external and internal threats."