

## BETTER TOOLS – BETTER EFFECTS

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The next eighteen months will see the introduction into service of two new weapons for New Zealand Defence Force personnel – a new rifle and a new pistol.

When New Zealand Defence Force personnel receive their new individual weapon, the MARS-L, they'll be getting a modern, modular weapon that came out on top after a rigorous period of testing.

The MARS-L, or Modular Assault Rifle System – Light, manufactured by Lewis Machine and Tools will be introduced into service later this year and rolled out across all three services by Mid 2017.

The Government announced late last year the \$59 million purchase of the new weapons system and associated equipment. At the heart of the system is the new rifle but the whole package also includes advanced day optics, a detachable grenade launcher that can be used independently of the rifle if required, and other ancillaries such as combat torches and sound suppressors.

With the Steyr rifles, which have been in service since 1987, reaching their end of life of type the decision was made to find a replacement individual weapon.

It wasn't possible to upgrade the existing Steyr rifles to meet all of NZDF's requirements, including the ability to easily use the full range of night vision ancillaries required to detect, recognise, identify and engage targets in a modern 24-hour battlefield. The Steyr's built-in 1.5 power optic was also a limitation.

Major John Lawrey, the Programme Manager for the In-Service Weapons Replacement and Upgrade Programme, explains that the aim was to procure a 5.56mm assault rifle with an open architecture configuration that was able to effectively engage targets out to 600 metres. The standard NATO 5.56mm calibre maintains inter-operability with ABCA/NATO military allies.

The Ministry of Defence ran the tender process and eight of the worlds leading arms manufacturers were selected to submit rifles. From there, NZDF carried



out the evaluation trial before a final recommendation was put forward to the Government.

The testing involved personnel from all three Services, and in a range of conditions, with the MARS-L consistently in the top three rifles for each evaluation criteria and the overall weapon of choice in the final analysis.

“There are many factors which made this rifle and weapon system a standout for us,” MAJ Lawrey says. “Its open architecture allows all of the current in-service attachments and accessories to be fitted to the weapon with the flexibility for other additions in the future”.

“Its ergonomic design means it is better suited to all shapes and sizes of personnel and it can be adjusted to fit when wearing body armour. It has fully ambidextrous controls. If you're right-handed, you can fire it off your left shoulder around cover without issue. We've got the accuracy we wanted, and it's got the versatility we wanted. It also meets the requirements of our Special Forces, so this rifle will be used by all of NZDF,” he says.



## RIFLE

### How many?

Navy:	425
Air Force:	800
Army:	4,343

Plus 3,472 in a pool for spares and repairs and deployments

“Reliability was also a factor in our recommendation to purchase the MARS-L as the individual weapon for our personnel. Over the course of the evaluation we fired more than 10,000 rounds on MARS-L platforms and there were very few stoppages compared to the other weapons used.”

The rifle will be shown at camps and bases early this year so personnel can get their first look at it, the first deliveries arrive from the manufacturer in July, instructors will receive their training in the weapons system around October with operational units the first to receive the new rifles towards the end of the year.

### The testing process

Eight weapons platforms were trialled as part of the process to find the right individual weapon for the NZDF. The evaluation included personnel from Army, Navy and Air Force, and was carried out from March to May last year. The trial included live firing, shooting from close quarters and back to 600m, and in all weather conditions. The trial was carried out with the help of the Defence Technology Agency which measured a number of factors including usability, mobility, acoustics, grouping capacity, energy, recoil and jump.

The MARS-L rifle was consistently in the top three rifles for all of the evaluation criteria and was the

recommended weapon when all the criteria were considered collectively. The LMT grenade launcher topped the assessment for the 40mm grenade launchers.

Cost wasn't a factor as the evaluation team did not know the pricing of rifles when evaluating the weapons. That information was held by the Ministry of Defence, which ran the procurement process.

### The weapons system package:

At the heart of the system is the new rifle but the whole package also includes advanced day and night optics, a detachable grenade launcher that can be used independently of the rifle if required, and other ancillaries such as combat torches and sound suppressors. It includes initial spare parts, storage/shipping solutions, armoury upgrades, blue weapons (plastic replicas of the real thing), training and maintaining manuals, introduction into service training, and marking and simulation systems.

### When and where

Early 2016: 'Show and tell'. Members of the individual weapon replacement programme team will go on a roadshow to camps and bases to talk about the new weapons and give personnel their first look of the rifle.

July: First rifles arrive in the country from the manufacturers.

October-December: Train the trainer and train the maintainer carried out.

November: First weapons introduced into service, starting with operational units.

Throughout 2017: Weapons introduced into service across NZDF.

There will be 'train the trainer' in May before the pistols are delivered to Navy, Army and Air Force personnel in the second half of this year.

As the Glock 17 Gen 4 pistol is introduced into service, personnel will notice some changes in the training for this weapon as the NZDF modernises its approach to pistol training.

## PISTOLS



**The New Zealand Defence Force will be joining Police and other militaries around the world that have chosen to use the proven and reliable Glock 17 pistol as their personal protection weapon.**

In May this year, the NZDF will begin to introduce the Glock 17 Generation 4 pistol into service, replacing the Sig Sauer P226 pistol which was introduced into service in 1992 and has reached the end of the planned life of type.

The Glock 17 Gen 4 pistols, recently introduced into the British Army, are known for their reliability. They're easy to operate, and easy to maintain as they have fewer parts than the Sig Sauer.

A variety of holsters and carriage options have been purchased including MOLLE and thigh rigs that allow the pistol to be carried when wearing armour. The previous holster was mostly suited for carrying the pistols on parade; the new holsters are more tactically designed and have been selected based on service requirements.

“The holsters are designed to securely retain the pistol,” explains POSCS Rik Stilwell. “there’s a simple locking mechanism which also allows the pistol to be drawn quickly when required.”

As part of the package, the NZDF will get blue weapons for training simulation.

### How many?

NZDF:	538 (includes HQJFNZ, SOC, Joint units and MFU)
Navy:	170
Air Force:	248
Army:	441
R&M, Reserve	489
Training Sim:	150

### Features:

The patented Glock safe action system that includes a trigger safety, firing pin safety and drop safety without requiring a manual external safety catch.

Rough textured frame to enhance grip

Interchangeable backstrap system to change pistol grip size

Reversible extended magazine catch

Extended slide catch.

### Specifications:

The Glock 17 is short recoil, striker fired, self loading pistol chambered for standard 9 x 19mm NATO ammunition. It comes with a 17 round, double stack, single feed composite magazine.

Calibre:	9 x 19mm NATO
Length:	186mm
Height:	138mm
Width:	30mm
Weight:	625g unloaded + 905g loaded
Barrel length:	114mm
Twist rate:	1 in 9.8"
Sight radius:	165mm
Trigger pull:	5.5lb (25N)
Magazine capacity:	17 round

