

OIA-2016-2436

26 April 2016

Mr Carl Gaylard

fyi-request-3852-9f18576b@requests.fyi.org.nz

Dear Mr Gaylard

I refer to your email of 5 April 2016 requesting, under the Official Information Act 1982 (OIA), the following information pertaining to the new rifle and pistol selected by the New Zealand Defence Force (NZDF):

1. *The specific models of firearms submitted for trial*
2. *The tests performed during the trial*
3. *The performance of each firearm in these tests*
4. *The reason for selecting the Lewis Machine & Tool Co Inc (LMT) manufactured AR15 derivative (M16/M4/etc) and Glock 17 handgun.*

The responses to each of your questions are provided below under the headings for the rifle and pistol replacement respectively.

Rifle Replacement

Specific models submitted for trial

In 2014 the Ministry of Defence conducted an open tender for a rifle to replace the Steyr rifle. Each vendor selected the specification of the rifle and grenade launcher. Trials were undertaken with both the vendor supplied iron sights and the standard in-service NZDF day optical sight (Trijicon ACOG) and night sights. Different barrel lengths were tested, with each vendor recommending a standard and short barrel. Vendors provided the bespoke ancillaries they recommended for testing, including bayonets, flash suppressors, and muzzle brakes.

The following rifles were compliant with the tender requirements and were assessed in a comparative evaluation (trials) in 2015:

- Beretta ARX 160 A3 II and GLX 40 mm Grenade Launcher
- Ceska Zbrojovka CZ 807 and CZ 805 40 mm Grenade Launcher
- Colt Canada C7/C8 IUR and Eagle 40 mm Grenade Launcher
- FN Herstal SCAR (L) and FN 40 mm Grenade Launcher
- Steyr Mannlicher AUG A3 and 40 mm Grenade Launcher
- Sig Sauer 516 and the RM Equipment 40 mm Grenade Launcher

- Heckler & Koch 416 A5 and 40 mm GLM Grenade Launcher
- Lewis Machine and Tools Inc LM8 CQB and M203 40 mm Grenade Launcher.

Tests performed during the evaluation

The comparative evaluation of the eight weapons listed above was conducted in 2015. The trials took place over three months, and involved a comprehensive range of tests including both practical firing and technical analysis. Twenty personnel drawn from the three services participated as the primary users. They fired all rifles in all conditions including whilst wearing and utilising all operational equipment, from body armour, cold weather clothing, air and sea clothing, and full face respirators. Technical and scientific support to the evaluation was provided by the Defence Technology Agency (DTA). Evaluation criteria and the tests conducted were as follows:

- **Suitability Effectiveness.** A maintenance evaluation was conducted to determine the ability of the NZDF to support and maintain each rifle for the duration of its anticipated service life if selected. The overall commercial package was also considered, including in-service support arrangements, price and technical and service information compliance.
- **Mission Effectiveness.** Each rifle was put through rigorous mission effectiveness evaluations to establish which weapons consistently provided the best small-arms effects to meet the requirements of the NZDF. This included extensive testing of technical weapon performance characteristics, such as accuracy over various distances, terminal ballistics, muzzle flash, weight distribution and acoustics. The testing was conducted using the rifle/grenade launcher combination and the grenade launcher in 'stand-alone' mode. Human factors were also assessed, which rated the performance of the rifles in various environmental conditions, and in the role-specific situations of weapon operators from the Army, Navy and Air Force.

Firing was undertaken at ranges out to 600 metres, with technical accuracy evaluations undertaken at 100, 300 and 600 metres. All rifles were treated equally, including routine user cleaning and maintenance. Reliability and other issues that arose were examined during all phases. Following the conclusion of the trials process, more ammunition was fired to verify durability.

The performance of each firearm in these tests

There is significant commercial sensitivity around the details of how each rifle performed in the evaluations. This information is considered Commercial-in-Confidence and is therefore withheld pursuant to s.9(2)(b)(ii) of the OIA, because disclosure would be likely to prejudice the commercial position of the vendors involved.

The reason for selecting the Lewis Machine & Tool Co Inc (LMT) rifle

The Lewis Machine and Tools Inc. LM8 CQB consistently rated the highest across the range of evaluation criteria, which informed the eventual decision to select this rifle over the others.

Pistol Replacement

Specific models submitted for trial

In 2012 the United Kingdom Ministry of Defence (UK MoD) conducted a comprehensive evaluation of seven pistols from various manufacturers as part of a project to replace the British Army's 9mm General Service Pistol. The NZDF was able to leverage off the information contained in this report, which decreased the scope of the NZDF's own pistol evaluation.

Taking into account the findings of the UK MoD Evaluation Report, the NZDF conducted an abridged evaluation in 2014 that included the Glock 17 Generation 4 pistol and the NZDF's current in-service pistol, the Sig Sauer P226.

Tests performed during the evaluation

The NZDF is not able to release the content of the UK MoD report without the express permission of the UK MoD. However, the NZDF evaluation assessed each pistol against criteria such as accuracy in different shooting scenarios, human factors and ease of use for pistol operators, mission effectiveness across the range of NZDF operating environments, and the ability for the NZDF to support and maintain each pistol for the duration of its anticipated service life.

The performance of each firearm in these tests

Specific information on the performance of each pistol during the evaluation is considered Commercial-in-Confidence and is therefore withheld pursuant to s.9(2)(b)(ii) of the OIA, because disclosure would be likely to prejudice the commercial position of the vendors involved.

The reason for selecting the Glock 17 Generation 4 pistol

The results of the NZDF evaluation illustrated that there was no discernible difference in the accuracy between the pistols evaluated. However, the human factors assessments indicated that NZDF pistol operators typically favoured the design and handling of the Glock 17 Generation 4 pistol, which informed the decision to select this pistol.

You have the right, under section 28(3) of the OIA, to ask an Ombudsman to review my response to your request.

Yours sincerely



G.R. SMITH
Commodore, RNZN
Chief of Staff HQNZDF