

# MASSEY STUDENTS COLLABORATE ON ARMY PROJECTS

**Army has begun collaborating with Massey University's School of Engineering and Advanced Technology to explore research ideas submitted by soldiers through the Army Innovation intranet site.**

Lieutenant Colonel Terry McDonald from the Army's Directorate of Strategy Development says there have been numerous great ideas suggested through Army Innovation.

"This project was started in order for Army to take ideas beyond concepts to see if we could practically implement them. We were keen to see if we could share resources to investigate the ideas in a reasonable time frame. Both Massey University and Army saw an innovative opportunity for students to take on a selection of the best ideas to investigate the viability of designing and prototyping an engineering solution" said LTCOL McDonald.

Two fourth year students from Massey University will take on two of the ideas as research projects. The first project is focused on developing a mechanical solution to sorting spent ammunition. Samuel Trotter is leading this research, supervised by Dr Liqiong Tang. Currently the process is done by hand to ensure all spent ammunition is free from explosive prior to scrapping. It is hoped that the solution will reduce safety risks and time commitments for soldiers.

The second project sees Salem Al Sallal, a fourth year Massey student from Kuwait and his supervisors Dr Ebubekir Avci and Dr Mark Tunnicliffe, develop a test for soft armour to assess its functionality. There is currently no reliable, low-cost and internationally recognised way of testing soft armour in a non-destructive way to see if it is still functioning as expected. Currently, soft armour has



an arbitrary shelf life of approximately five years based on manufacturers' recommendations. After that time it is disposed of, but disposal occurs despite the fact the soft armour may be totally unused and in perfect working order.

LTCOL McDonald says, "these projects represent the first of many future collaborations between Army and Massey School of Engineering and Advanced Technology as Army looks to continue to utilise the many great ideas that come from our soldiers".

The students have been put in contact with relevant subject matter experts from within the New Zealand Defence Force to provide advice and guidance on an as required basis. The outcomes from these projects will be covered in a future story.



**Massey student and researcher Salem Al Sallal tests the functionality of soft armour in the laboratory.**

## LITTLE HARRY'S KIWISAVER FUNDS ARE GROWING WITH HIM

Little Harry Jackson's grandfather, Lieutenant Colonel Derrick McMillan, enrolled him in the new New Zealand Defence Force KiwiSaver Scheme last year. One year on, the KiwiSaver Scheme has had its first birthday and Harry is now 21 months' old.

At the time LTCOL McMillan, a long-serving Army veteran and now Senior Human Resources Business partner at Headquarters saw it as an opportunity not to be missed.

LTCOL McMillan reports no regrets in enrolling Harry in the scheme. "Harry was enrolled in the high-growth fund as we figured he would not require access to his funds for some time. During the 12 months of membership Harry has grown considerably, as have his KiwiSaver funds. We are so impressed with what has happened that we have now enrolled Harry in the NZDF FlexiSaver Scheme. These schemes are all about NZDF looking after its own and I want my grandson and other family members to help contribute to this and to share in the benefits."

"I'm also impressed with the additional innovations launched by the schemes in the last 12 months. The phone app is particularly useful, as are the monthly performance reports."

The NZDF schemes include features that are not available to members of other schemes, including



**LTCOL Derrick McMillan and grandson Harry.**

the retention payments paid to NZDF members of the KiwiSaver Scheme and the monthly prize draws (16 Prezzy cards of \$250 per month).

With membership in the two new savings schemes now exceeding 2,000 and funds under management of \$33m, the schemes appear to be going from strength to strength. That can only be good news for Harry.

To find out more about the NZDF Savings Schemes and access the application forms Google [www.nzdfsUPERFACTS.co.nz](http://www.nzdfsUPERFACTS.co.nz) or phone Mercer 0800 333 787.

## A MESSAGE FROM DCA



### TRAIN HARD, FIGHT EASY

In this issue of *Army News* you will read about a bunch of our teammates who have pushed themselves to excel. Recently, four soldiers won gold in the national WorldSkills competition— that's the most we have won in several years. Also, a team from QAMR placed second in Exercise Worthington, an international armoured exercise in Canada. Ten days ago Army Reservists took all the top places in the NZDF Reservist of the Year competition. Furthermore, several weeks ago Linton hosted the Army Innovation Challenge that recognised Regular Force and Reservist soldiers who are successfully challenging the status quo and making our Army better.

Our purpose is to go into harm's way to protect others. Therefore, we owe it to our nation, our teammates, our families and those others we protect to win. Winning is the result of a thousand small improvements done daily at individual and team level. If we don't improve daily, we are going backwards.

Warfare is a search for asymmetry. Our adversaries are always trying to be better than us, to find our weaknesses and exploit them. Ultimately the price of not being better than the bad guys is that we, or those we support, lose in battle. The Special Air Service keeps their edge through the unrelenting pursuit of excellence. For the SAS, excellence is not a destination it's a journey that never ends.

The soldiers' maxim – train hard, fight easy – is another way to express the pursuit of excellence. And while resilience in the face of adversity is crucial to winning, to succeed in the modern security environment requires hard training to be smart training too. In part, this means understanding what the pursuit of excellence isn't.

The pursuit of excellence isn't the 'pursuit of more'. In a firefight the comms needs to be excellent, but lots of unnecessary communications can hinder survival. It is better that only the essential information is shared clearly and crisply between a team that is alert, listening and well drilled. At an Army level the same is true. Excellence doesn't necessarily mean adding more kit, more activities or even more money. Although, in the right proportion and well focused, those things are essential to building combat power.

The excellence journey starts in the detail. To me there are three steps. 1) Understand your role, how it fits in the wider team and what it takes to win. 2) With that figured out, simplify, simplify, simplify. Get rid of any unnecessary processes, kit or activities that slow the boat down. If it doesn't have a paddle, it shouldn't be on the waka. 3) Then focus on improving and connecting those things that make us a better fighting force. Simply put: 'understand it – simplify it – improve it'.

To quote the Chief of Defence Force, if we rest on our laurels, or adopt a "near enough is good enough" attitude, someone, somewhere will be doing more, and when we encounter them we will lose. What I love about our Army is its restless Kiwi spirit. Every day, across the Army, people are inventing things, improving things or improving their skills. The men and women I mentioned at the start of this article are recent exemplars.

Train hard, train smart, fight easy.

**Brigadier Chris Parsons**  
Deputy Chief of Army