



ARMY INNOVATION

Law student, Army Reservist and innovator 2LT Campbell Smith proposed the concept of using drones to film basic infantry manoeuvres. This footage can be used to develop a video-based training system that can teach a generation of new soldiers who are well versed in all things digital. It earned him first place in the 2016 Army Innovation Challenge, and gave him the chance to shape the concept into reality. This is his story.

Innovation allows Army to be flexible and smart with the way we get the job done and how we meet our operational requirements. Whether that is innovation in the way we approach problems, innovation in the shape of new kit that increases efficiency and capabilities or innovation in how we teach and train, relevancy in the modern global environment hinges on how we look forward, all the while factoring in our past and lessons learned.

Innovation at all levels is to be encouraged, and it was for that reason that I, at the time a Reserve Infantry Private, entered the Army Innovation Competition in August last year. In its initial stages my concept focussed on using a drone to film basic infantry manoeuvres taught on Regular Force and ARes AARCs. Using the recorded footage, I intended to create a library of training material that instructors could use to show recruits what they are required to do in certain situations. In essence this was a digitisation of our recruit training, moving away from black and white drawings and whiteboards, into video training where important information could be overlaid on-top of the footage. It seemed to me a simple and effective way of teaching the new generation of soldiers, who have been learning with video for most of their lives. I did some initial research, came up with a skeleton concept from beginning to end and entered the Innovation Challenge. The result of this saw me pitching my idea to a judging panel of senior Army and NZDF personnel; which in itself was a great piece of personal development, as it certainly isn't every day that you get to present a home-grown idea to DCA and SMA. I was lucky enough to come away with





first place against some stiff competition and was given the chance to work within Army Innovation and make the idea reality.

Once I began work on my project, the Army Innovation Manager pointed me in the direction of the Defence Innovation Framework. Using this framework, we utilise a Minimum Viable Product (MVP) in order to test the concept. An MVP is a low risk, low cost, proof of concept that is often done at a portion of the actual envisaged product. In this way, if the stakeholders approve the MVP then there is a higher chance that the final product will meet their expectations. Conversely, if the stakeholders are not happy with the MVP, then the idea can pivot, adapt and develop into a more suitable solution. The cost is low, and the potential for reward is high. In a sense, Army Innovation taught me to use the MVP as a reconnaissance patrol for innovation ideas.

Once I had a solid understanding of the framework, I began searching for leads and contacts who could help me achieve this MVP. Elements of the fine-tuned final product were slowly shaved off to create a prototype that could be shown to stakeholders and beneficiaries to prove that the idea does have potential. Units have been open in offering assistance and have expressed interest in the future of the project. My concept is now coming close to realisation and I hope to submit the MVP for assessment in the next few months.

Army Innovation has been very helpful in their guidance and development of my idea. This process has seen me in future-proofing discussions with Combat School, regarding what they as a potential user would want from a similar system in the future, undertaking a RPAS operators' course run through Massey Aviation and, as a highlight, attending in the Australian Army's Defence Entrepreneurs Forum (DEF-Aus) in Canberra representing my idea, Army Innovation and NZDF, as a prize for winning the Army Innovation Challenge. DEF-Aus provided innovators within the ADF an opportunity to pitch their ideas to a panel of judges and peers, with concepts ranging from kit and equipment, to high level integration with international partners and other services.

All up, entering that competition with a basic idea, presenting it to a high level panel, and now putting my money where my mouth is has seen me learning a whole new way to innovate, networking with stakeholders, getting onto accredited courses and the opportunity to travel through New Zealand and Australia.

Some of the best ideas that Army has come from those men and women on the ground, dealing with day to day problems and finding smart solutions. If you can think of something that presents an issue, come up with a concept and develop a way to make that concept work for Army, then I encourage you to jump on board with this opportunity, regardless of your role and rank, including civilians. Remember, we're looking at concepts that allow us to do our work more efficiently and effectively. You have the chance to make an impact within wider Army, and develop an idea that will make you and your mates better at what we do.

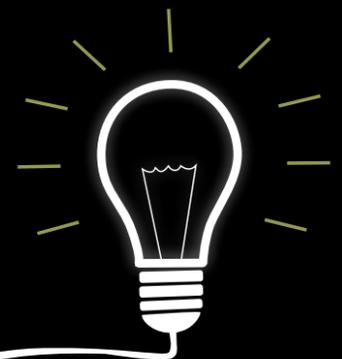


Second Lieutenant Campbell Smith

Entries open now!



INNOVATION Challenge



Calling for entries

The 2017 Army Innovation Challenge is now open for entries.

If you have a good idea that can benefit our organisation, get onto the Army Innovation page on DIXS and download the entry form, or email Armyinnovation@nzdf.mil.nz to request it. Any new ideas or ideas implemented since July 2016 that benefit our organisation can be entered. Entries are open to all ranks, and civilian staff.

You can enter your idea in either the Equipment, Process or Organisational Category, plus the People's Choice Category. If you have any questions, or would like further advice, contact us at Armyinnovation@nzdf.mil.nz.

The categories are as follows:

EQUIPMENT CATEGORY	PROCESS CATEGORY	ORGANISATIONAL CATEGORY	PEOPLE'S CHOICE
Ideas that affect in service equipment or promote the introduction of new equipment.	Ideas that seek to improve existing processes within the NZDF.	Ideas that change the way that the Army or NZDF operates as an organisation, or that introduce a new way of operating.	Once your submission is accepted, you'll be invited to post your idea on the Hub Ideas Page. Hub users will then be able to comment and 'like' your idea. The idea with the most likes will win the People's Choice award.

Key dates:

APR 13

Entries open

JUL 01

Entries close

AUG 01

Pre-Selection judging panel

AUG 25

Final Judging