ot long after my arrival at Base Ohakea, the government announced the purchase of P-8A Poseidon aircraft and that these aircraft would operate out of Ohakea. This initiated a lot of enthusiasm on base and within the wider community, as it signaled growth and confirmed Ohakea as a Military Air Base of significant strategic importance.

While this is a defining decision and announcement, there are a lot of capability or introduction into service projects already underway here. These include some significant infrastructure projects that will further enhance security and airfield compliance and improve our enablers’ ability to continue their great work in support of deployed air operations. A few examples include:

- The NH90s on track to become operationally deployable by April 2019, with the squadron having released, or continuing work towards releasing, many subsets of capability that align with the Statement of Operating Intent.
- Construction commenced on the new NH90 simulator building, which will be located adjacent to the existing A109 simulator in the North East Quadrant. This is due for completion in 2020 along with replacement car parking areas.
- The B200 King Air concluded service last month and we have started transitioning to the KA350 King Air. Three aircraft will arrive at Ohakea by the end of the month, with two of these aircraft configured to support repatriation of the Air Warfare Officer and Naval Observer Training.
- The Airfield Lighting and Movement Area Guidance Signage (MAGS) project is now underway and will continue until the end of 2019.
- The flight line fencing project is complete and we now have the ability to fully secure operational areas of the airfield.
- The Aviation Refuel Section successfully took the lead on certifying the Deployable Bulk Aviation Fuel Capability (DBAFC) delivery system ready for the 18/19 Humanitarian Aid and Disaster Relief season.

There is an air of excitement over the prospect of some new infrastructure, none more so than the Aviation Refuel Section, which has been resident in a temporary Portacom maze for the past 20 years! The base will also get a dedicated Rehabilitation Centre with the conversion of the old flight line building adjacent to No 1 Hangar. The other significant piece of work under action is in conjunction with the New Zealand Transport Authority and that is around how we can make a safer entry and exit from the base.

It is going to be hard to top off a year with so much happening, but lucky for us we have the perfect occasion for a celebration – 20 December, 2018 marks the 75th Anniversary of 42 Squadron.

By Group Captain Jackie Ward
Less than a week after a major earthquake and tsunami hit Indonesia’s Sulawesi province, a Royal New Zealand Air Force C-130 Hercules was delivering tonnes of emergency aid and evacuated people whose villages had been destroyed by waves that swept through the area. Thousands were killed and injured and hundreds of thousands displaced by the disaster.

The 7.5-magnitude quake struck on September 28 and sparked a tsunami that generated waves up to 6m high. The worst hit area was Palu, in the Sulawesi province. Home to about 300,000 people, Palu was flattened by the tsunami, with thousands of homes and businesses reduced to rubble.

A multinational operation to fly aid to disaster zones was staged out of Balikpapan, a port city in Indonesia’s East Kalimantan province - about 380km west of Palu.

The official death toll from the two disasters currently stands at more than 2000, with about 11,000 others injured. The United Nations humanitarian agency, UNOCHA, estimated about 200,000 people required urgent humanitarian aid.

The first Hercules flight into the devastated area brought in more than eight tonnes of aid supplies for survivors. They were from the emergency stores of the Ministry of Foreign Affairs and Trade (MFAT) and included generators, 10-litre collapsible water containers and tarpaulins.

"Those supplies sought to meet the basic needs for power, clean water and shelter of the people displaced by the twin disasters," Joint Force New Zealand Commander Major General (MAJGEN) Tim Gall said.

After delivering the aid, the Air Force crew joined an international effort to help Indonesian authorities in transporting emergency supplies and personnel to Palu and other affected areas.
“The scale of destruction was worse than I had anticipated.”

The Indonesian authorities and locals at Palu and Balikpapan thanked the NZDF personnel for helping.

“Our Hercules was one of the first two foreign aircraft to deliver aid to Palu and Indonesian soldiers cheered as we offloaded the supplies.”

By the end of the week-long operation, the Hercules and its 15-member detachment had delivered about 70 tonnes of aid to the devastated region.

Co-pilot Flying Officer (FGOFF) Max Longdill said the first time they flew into Palu was about a week after the disasters and they were shocked by the destruction.

“Thousands of homes were flattened, the coastline had been destroyed by the tsunami and there was massive liquefaction.”

“We worked with Indonesian authorities and our international partners to provide an air bridge between Balikpapan and Palu and helped bring aid supplies to where they were needed most,” MAJGEN Gall said.

Hercules captain Flight Lieutenant (FLTLT) Dave Natapu said the aid supplies helped address the urgent need for clean water, power and shelter in the disaster zones.

“I think we did a lot of good here. The entire team was looking forward to getting stuck in,” he said.

The aircraft also evacuated nearly 160 survivors, including babies and children, from Palu. Many of them had slept outdoors for days and queued to get into the Hercules. They carried backpacks and bags and said they had lost their homes and relatives.

“There was a palpable sense of relief from the evacuees when they got into our Herc,” FLTLT Natapu said.

“They erupted in cheers and gave a thumbs-up sign before we took off.”

The devastation caused by the twin disasters was apparent as they flew into Palu on Friday afternoon, he said.

CPL Toni Thompson helps a couple and their baby

CPL Laura Kjestrup helps evacuees
Palu’s topography, combined with the impacts of the earthquake, posed additional challenges to the aircrew, he said. “Palu is located in a large valley. There is only one way in and one way out.”

Aircrew also had to be especially vigilant of airfield conditions and other air traffic, because the earthquake had knocked down the air traffic control tower. “It was very busy, with numerous fixed-wing aircraft and helicopters bringing in aid and rescue personnel.”

Logistics specialist Leading Aircraftman (LAC) Frankie-Lee Murray-Birch said the operation was challenging. “We started as early as 4am every day and worked long hours. But it was great knowing that what we were doing helped people.”

The highlights for her were meeting some of the survivors and working with personnel from other countries, particularly Indonesia, Australia, the United Kingdom and the United States, at Balikpapan.

“The survivors shook our hands and thanked us as they got off our Herc in Balikpapan. I will never forget the gratitude and goodwill they showed us,” she said.

Although the NZDF had a relatively small team, personnel from other militaries helped to get the job done easily, she said. “Many hands truly make light work.”

Corporal Toni Thompson hit the ground running as a trainee Air Loadmaster when she was sent to Indonesia on the mission. “The mission to Indonesia was my first flight as a loadmaster and also my first deployment on a humanitarian aid and disaster relief operation,” she said.

“The evacuees were so relieved to know they were getting out of the devastation in Palu. Through hand signals, they showed us how happy and grateful they were,” she said. “Together with the Indonesian soldiers they cheered us, shook our hands and took our photos. The kids were very excited to get on our Herc but were so well-behaved. They were great passengers.”

MAJGEN Gall said in Indonesia, the NZDF had shown once again that it always stood ready to help its neighbours during critical times. “The work of our personnel in Indonesia should make every New Zealander proud,” he said. “The goodwill displayed by the Indonesian authorities and the survivors has been the best reward for their efforts.”
As part of its disaster relief mission to Indonesia, crew on board the C-130 Hercules transported components of a water purification plant to Palu, to help ease the acute shortage of drinking water in areas hardest hit by the earthquake and tsunami.

C-130 captain Flight Lieutenant (FLTLT) Dave Natapu said they delivered the equipment, which had been donated by France, and the 32 French engineers who would install it.

"Water supply is one of the key necessities in the aftermath of any disaster," he said.

"There are obvious dangers in people drinking water from potentially contaminated sources, so having this water purification system would help address that."

During the Humanitarian Aid and Disaster Relief mission, the C-130 had also flown rescue personnel and officials, as well as emergency supplies, that came from Japan, Australia, the United Kingdom, France and Germany, FLTLT Natapu said.
COUNTER-TERRORISM AT RAINBOW’S END

In the dim street lights of South Auckland, Commandos from the 1st New Zealand Special Air Service are ready. An active shooter is on the move in the nearby amusement park, Rainbow’s End. The Commandos’ role: to neutralise the terrorist threat and rescue a large number of people caught up in the situation.

Supported by two No. 3 Squadron NH90s, members of Counter Terrorist Task Unit 1 (CTTU1) make their way into the park and begin working towards their objective.

Responding to an active shooter is one of many counter-terrorist operations the members of CTTU1 trained for recently during Exercise Saracen 2018.

The exercise tested new capabilities and techniques, as commandos responded to situations simulating modern global terrorist activities that could pose a threat to New Zealand and its citizens.

To maintain an effective counter-terrorist response capability for New Zealand, D Squadron conducted a number of tasks throughout the country, involving scenarios in public places such as schools and airports, as well as more isolated areas, including an island in the Hauraki Gulf. The introduction of the new Battle Management System delivered through the Network Enabled Army Project was a key component of the exercise. The radio system enabled better command and control at the squadron and troop level, as well as providing the capability to conduct geographically separate operations through a Special Operations command and control element and ground force commanders.

The troop commanders and team leaders were tested in their command and control by dynamic scenarios putting pressure on their ability to complete complex tasks while coordinating a variety of assets, including the NH90s, C-130 Hercules, snipers, military working dogs and explosive ordnance disposal operators. Testing the commanders to their limits, operations were held in difficult terrain, such as multi-storey buildings. A large group of civilians played hostages.

Exercise Saracen 18 provided valuable experience for five recently graduated Commandos from the Special Operations Tactical Assault Course (SOTAC). The new Commandos were able to apply their recently learned skills in different scenarios in different areas of New Zealand.

One of those graduates, Private J, had the opportunity to deploy with the Squadron as an Assault Team member.

“Exercise Saracen provided a good opportunity for us newer guys to integrate into the team and put to use the skills learnt on SOTAC,” he said.
C-130 Hercules and its crew recently took part in the Advanced Tactics Aircrew Course (ATAC), run by the Advanced Airlift Tactical Training Centre (AATTC) based in St. Joseph Air Force Base, Missouri, and Ft. Huachuca, Arizona. We were accompanied by seven maintainers, a joint load inspector from the 5th Movement Company and an intelligence officer from No. 230 Squadron, who attended the International Mobility Intelligence Course (IMIC).

ATAC teaches air mobility aircrew how to tactically employ the aircraft to increase survivability in hostile/combatant environments. In the flying phase of the course we conducted sorties that varied from academic, non-tactical scenario learning, where we practised defensive manoeuvres, through to more complex sorties. Those involved mission planning, integrating with other force elements – including being escorted by two USAF A-10s and being briefed by foreign intelligence officers on IMIC – carrying out on-call (rapid plan) airdrops, landing on tactical dirt strips, and practising manoeuvring with USAF F-16s.

ATAC was a great learning experience for our crew, and it also provided the opportunity to practise the tactical flying we conduct at home but in the hot and high conditions of Arizona, which helped to increase our awareness of how the aircraft behaves in desert environments. It also gave our loadmasters an opportunity to practise an unloading technique using 55-gallon drums to support heavy pallets that slide out of the aircraft. This is used when offloading equipment such as forklifts, which are not available in a combat or Humanitarian Aid and Disaster Relief scenarios.

ATAC was also attended by two other nations – the Republic of Korea Air Force, with an MC-130H, and the Italian Air Force, with a C-130J. We had the added challenge of a language barrier when working together to plan our sorties in mission planning cells, but enjoyed working alongside two nations we hadn’t had a lot of opportunities to work with previously. Another great experience was when the Italians proved they were great cooks by hosting a delicious Italian pasta feast at the end of the first week, with a large amount of the ingredients brought with them fresh from Italy.

Other enjoyable parts of the course included the Low Level Awareness Trainer (LLAT) and manoeuvring against an F-16. The LLAT involved flying around high terrain, conducting ridge crossings and immediate descents and turns – essentially flying the aircraft near its performance limits to achieve the missions. One of the advantages for the crew during the manoeuvring sortie with the F-16 was having the Rear Vision Device (RVD) fitted. The RVD is like an upside-down fish bowl fitted to the overhead escape hatch in the flight deck. The RVD, affectionately known as the Bubble, allowed a crew member to sit with their head in the bowl and have a 360-degree view around the aircraft. The Bubble can help the crew identify threats, especially from behind, and has an unobstructed view above to look for hostile aircraft. During the sortie with the F-16 the Bubble had the best view of the jet, so was able to direct the pilot how to manoeuvre to defeat their range of employable weapons.
Orion Crew Finds Men Adrift in the Pacific

No. 5 Squadron crew on a P-3K2 Orion found two fishermen adrift on a boat in the Pacific, four days after they were reported missing in Kiribati.

Acting Air Component Commander Group Captain (GPCAPT) Daniel Hunt said crew on the surveillance aircraft spotted the men on a five-metre fishing boat on their second day of searching for them.

They contacted two ships in the area and asked them to pick up the men.

“After refuelling in Tarawa, the Orion returned to the area to help facilitate the rescue,” GPCAPT Hunt said.

The two men were rescued and recovered. The Orion was sent to join the search after a request from the Fiji Maritime Surveillance Rescue Coordination Centre (FMSRCC), which is responsible for the search area.

The FMSRCC said the two men – aged 32 and 42 – were last seen leaving on a fishing boat from Kuria, a pair of reef islands in Kiribati’s Central Gilbert Islands.

NZDF support was requested after a search by local aircraft and a patrol boat had no success.

The search area was about 2,000 kilometres north of Fiji.

DEFENDING NEW ZEALAND’S SOVEREIGN TERRITORY

Sovereignty

The legal identity of states in international law, which provides order, stability and predictability in international relations since sovereign states are regarded as equal, regardless of comparative size or wealth.

Air Power in Action
A No. 3 Squadron NH90 helicopter conducted an aerial surveillance patrol of Fiordland’s stunning fiords recently to help Environment Southland check compliance with resource consent conditions.

Flight Lieutenant George McInnes said they conducted the day-long patrol over Milford, Doubtful and Dusky sounds.

“We are pleased to have been able to assist Environment Southland in conducting its first aerial surveillance patrol of Fiordland, where harsh terrain and remoteness make many areas difficult to access,” he said.

Environment Southland Deputy Harbourmaster Ian Coard said no red flags were identified in the patrol.

“All the structures we saw had resource consents and all the vessels had proper markings.”

The patrol also enabled Environment Southland to assess the area and identify potential landing zones for helicopters to help prepare for future maritime emergencies, especially those involving cruise ships, Mr Coard said.

“Fiordland’s fiords are very remote, so in case of an emergency we need to know where cruise ships can go and wait until help arrives,” he said.

There is road access to Milford Sound, but access to Milford, Doubtful and Dusky sounds is mainly by sea or air.

In the past, Environment Southland conducted compliance patrols using vessels from the Department of Conservation and the NZDF.

“We were able to cover so much ground during the aerial surveillance patrol and we could not have done it without the support of the NZDF,” Mr Coard said.

Visitor numbers to Fiordland are among the fastest growing in the country. Up to 115 cruise ships are expected to visit Fiordland this season, compared to 96 the previous season. Milford Sound alone reportedly attracted about 870,000 visitors in 2017.
Tapping into Diversity

By Squadron Leader George Magdalinos

Stats that suck....

While female representation across the RNZAF has risen to approximately 19%, the largest trade groups within the individual Science, Technology, Engineering and Maths (STEM) trades have very, very low levels of representation. Notably, Māori, Pasifika and Asian representation (irrespective of gender) sits rather stagnantly at 6.3%, 2.0% and 3.4% respectively. This suggests as a significant employer within New Zealand we are not attracting or tapping into entire pockets of talent. Combined with the global skills shortage and a rapidly advancing technology revolution the competition for talent in the not too distant future is going to become increasingly fierce. We simply cannot afford to not invest in the growth of our future force.

‘To be diverse people’ is the literal translation of Tangata Kanorau. As project manager of Project Tangata Kanorau (Project TK) I am privileged to be leading the charge in terms of enhanced engagement and attraction work across the diversity spectrum on behalf of the Air Force. The purpose of Project TK is two-fold; one aim is to address the shortage of females applying for traditional STEM roles (i.e. technical and aircrew) and the other is to increase Air Force engagement with Māori, Pasifika and Asian peoples with a particular focus on attracting much higher numbers in the future. Project TK isn’t about lowering standards or filling quotas – very simply it’s about ensuring the recruiting pool is flush with diverse talent.

Project TK is essentially a continuum of engagement, which for the most part works with primary and intermediate school aged children. For the real littlies it is about unleashing our airmen into the communities in a super-fun and engaging way, sharing our stories and creating a positive message around Air Force and aviation. For the intermediate-aged children it is about instilling confidence in STEM through interactive aviation-themed hands-on activities and thereafter providing context to careers, so we are influencing subject choice at NCEA levels. Significantly, it is also about influencing the influencers so the traditional methods of engagement through schools is changing to a more community-based approach. It will be nigh on impossible to achieve scale acting independently so Project TK is also about building relationships, partnerships (both internally and externally) and working collaboratively across NZ Inc.

Although Project TK is staffed with only one fulltime staff member it will take all of us in some capacity to make sure we can succeed. This is an open invitation to get involved, send me your ideas, participate in the workshops or hackathons and of course in the delivery of various activities. If you want to know more please get in touch.
Big Challenges at Large Exercise

By LHLM Josh Boon

Exercise Rimpac is the biggest maritime exercise in the world and for each country, unit and individual the six-week exercise has its own set of tasks and challenges.

For the 12 embarked ship’s flight personnel of No. 6 Squadron on HMNZS Te Mana these challenges came in a much different form than they were expecting. During a routine inspection, the main gearbox of the SH-2G(I) Seasprite was found to have sprung a leak. Normally a small amount of oil leakage is nothing to be overly concerned with and is commonplace on the aircraft. This, however, was different and would only get worse.

Although the ship was reluctant to lose the bulk of its offensive capability, it was decided that the aircraft would be flown ashore for repair.

With great luck, hanger space was found at the US Marine Corps Base at Kaneohe Bay.

Although it was the weekend, the helpfulness of our host Helicopter Marine Strike 37 was quickly evident after a dozen people showed up, coming in on their own time to give the team a helping hand.

Squadron HSM 37, operating Seahawk Romeo aircraft, has an almost identical role to No. 6 Squadron. It even flew Seasprites until 1993, with several former operators paying a visit to the New Zealand aircraft for a trip down memory lane. It was discovered later that a New Zealand Seasprite, tail number NZ3617, was among the aircraft operated by the unit.

Working with and alongside an American helicopter unit provided a unique opportunity, with plenty of conversations, comparisons and banter from both parties. An added bonus was the enormous hanger space and fully equipped gantry to aid the maintenance team in the delicate removal and replacement of the gearbox. The maintenance team dived into the task headfirst. Four extra aircraft technicians were flown from Auckland by No. 40 Squadron C-130, along with a spare gearbox and rotor blade.

In temperatures exceeding 30°C and working on the aircraft for up to 16 hours a day, the team managed to remove the leaky gearbox and replace it with the new one in just 10 days.

It was the first time the squadron had completed a gearbox change in six years and with the challenge of working away from our squadron and ship, the maintenance team performed exceedingly well.

At the earliest opportunity after the ground runs and test flights the eager aircrew were able to fit in several flights around the Hawaiian islands. Flying alongside Cobra gunships, F/A 18 Hornets and many more aircraft was a huge buzz for everyone in the crew. This, coupled with flights around the low-flying training areas and stunning Jurassic Park scenery of Hawaii, was an incredible experience for all involved.

In all, it took 1142 maintenance hours over 11 days to complete the task, which represented a huge effort for the ship’s flight. Although the involvement in Rimpac was less than first anticipated, the experience that the team had in Kaneohe Bay was unique for everyone, and ended with new challenges, new friends and an experience that everyone thoroughly enjoyed.
INVICTUS GAMES – LIFE CHANGING

By Sharon Lundy
Corporal (CPL) Megan Marshall has a message for anyone considering applying to compete in the 2020 Invictus Games in The Netherlands: “Please do.”

The Air Force logistics specialist and the 24-strong NZDF team have just returned from the Invictus Games Sydney 2018, bringing with them the Exceptional Performance of the Games award (George Nepata), and two medals (Craig Wilson gold in the 1500m and Nu Filo bronze in the shot put).

But the Games are not all about medals; just getting to the start line is a win for many of the injured, wounded or ill competitors.

CPL Marshall said a Games highlight for her was being part of an “Unconquered” swim relay team, which comprised swimmers from different countries.

“It was a truly treasured moment for myself and one that really highlighted what the Invictus Games is all about. I also gained new friends from it,” she said.

“To anyone thinking of applying for the next Games, all I can say is please do. I can’t tell you how much Invictus will change your life – only that it will. The only thing you will ever regret is not signing up.”

Fellow team member Nicki Fairbairn also recommended it to others, especially those with mental health challenges.

Ms Fairbairn previously competed in the Toronto Games and said she was much calmer this year as she knew what to expect.

“In Toronto I was a nervous wreck. In the archery this year I was cool, calm and collected. I was dancing down the range with the UK competitors and it was awesome.

“I vowed that I was going to have fun this time, and what will be will. If I won something great, and if not, I gave it everything.”

Prince Harry created the international adaptive event, which uses the power of sport to inspire recovery, support rehabilitation and generate a wider understanding and respect for wounded, injured and ill current and former service men and women. This year’s event involved 500 competitors from 18 allied nations competing in 11 different adaptive sports.

Mr Nepata, who was left a tetraplegic after he was injured in a training accident in Singapore in 1989, said he was humbled to receive the Exceptional Performance award.

The award recognized his tremendous contribution to the NZDF’s wheelchair rugby team; as the only team member fully dependent on a wheelchair he had to play all five games. He had another special moment during the game against Australia, when the Australian and New Zealand teams combined to ensure he scored a try.

“It [the award] was something I never expected and just came out of the blue. It was an awesome atmosphere going through the crowd, through the other competitors, just shaking their hands, high-fiving and clapping. It was just an overwhelming and humbling experience,” he said.

“This has been a life-changing moment and experience that I’ve shared with my teammates. I’m just so proud of them all. They’re all helping me.”

The NZDF team is sponsored by Auckland RSA, Christchurch Memorial RSA, Fulton Hogan, Jaguar Land Rover and Direct Sport.

The team’s journey can be followed here:

facebook.com/invictusGamesNZ
Instagram.com/NZDFInvictusTeam
@nzdefenceforce
This year marks 100 years since the introduction of the “Hand and Thunderbolt” emblem, currently used by the RNZAF Communication and Information Systems (CIS) Trade. The emblem was introduced on 19 September 1918 to be worn by Royal Air Force communicators and subsequently adopted for use by the RNZAF. The original, crafted in red silk stitching on a black background, led to the more widely recognised light blue “fist and sparks”. CIS recently chose to refresh the emblem as part of a wider RNZAF project to re-establish trade identifiers. The refreshed emblem represents a remarkable transition from humble beginnings to cyber-warfare.

Prior to World War I, signals were sent by communicators using pyrotechnics, or by laying out panels of white cloth on the ground in patterns that had pre-determined meanings when read from the air. The advent of radio brought vast improvements. By using brevity codes, messaging could be rapidly achieved by using just a couple of characters.

To recognise the unique tasks undertaken by communicators, Lieutenant Colonel Lionel Charlton pushed for a trade badge to represent the dangers communicators faced through necessary exposure on the battlefield. The emblem was also to indicate the wearer was a ‘trusted agent’, avoiding delays in a military culture that disallowed direct conversation between officers and other ranks.

Warrant Officer (W/O) Tony Johnstone said early communications systems and procedures were developed using flashing lights, and later as electrical impulses along wires. This was digital communication in the purest sense. Radio followed and was a massive leap forward in regard to communication range.

W/O Johnstone was proud to be one of the few remaining communicators to have trained in Morse. “In 1976, we were trade-tested at 18 words per minute, but communicating with seasoned air-electronics operators aboard P-3B Orions of that era inspired progress and esprit de corps.” Morse remained in use on maritime missions until its eventual withdrawal in 1978.
Radio communications were transformed in 1965 with the introduction of new aircraft with new radio systems. Increased bandwidth and improved signal reception meant more effective and efficient information exchange. Radio systems have continued to develop over the years, offering automated path management, internet protocol functionality and improved capacity. “We use our tradecraft to optimise the bounce or the bend [of radio signals],” said W/O Johnstone. “Solar cycles and prediction data, antenna systems and specialist equipment, and ultimately our ability to coordinate these things determine how well, or how poorly, our application of this art will be.”

Nowadays, satellite communications systems are in routine operational use, allowing wideband communication services to be provided to our forces operating in remote and austere environments around the world. Providing network connectivity to deployed force elements wherever they operate is the role of the modern-day communicator.

Wing Commander (WGCDR) Mike Parry said the “network” had become the centre-piece of the modern battlefield. “We are operating in a network-centric era where it’s all about being connected to the ‘network’. Network connectivity provides situational awareness...using sensor systems we can see and understand what’s happening around us; the network provides a means for command and control...the ability to communicate orders and instructions; and the network helps us understand our own states of force readiness,” he said.

“Force elements that are not network connected will fight blind,” WGCDR Parry predicted. “They’ll lack freedom of manoeuvre and will require dedicated resources for them to operate within the modern battlespace.”

The critical part played by radio or satellite systems is becoming harder to see, because it is the information services carried by these systems which have become the currency in which CIS now trades. On a good day, users will be none the wiser, but when any carrier system fails, information stops; all trading stops, and the market descends into turmoil until services are restored or reprioritised to alternate systems”.

RNZAF CIS are as much looking forward to taking their refreshed emblem into its second century, as they are looking forward to answering the many calls upon their services to deliver and operate new network-centric capabilities. “

Additional information from the RAF Historical Society Journal, No. 50
Kicking off new Director of Music Flight Lieutenant (FLTLT) David Gallaher’s first Air Force band concert with the Olympic Fanfare set the theme for the show at Wellington’s Michael Fowler Centre.

Playing to a packed audience, including Governor-General Dame Patsy Reddy, Minister of Defence Ron Mark and the Chief of Air Force Air Vice-Marshal Andrew Clark, the show featured a blend of traditional, modern and jazz hits – plus a few percussion originals.

Soloists Leading Aircraftman (LAC) Stephanie Paris and Leading Aircraftman Barbara Graham returned to the stage and captured the crowd with tunes including *Teach Me Tonight, Someone to Watch Over Me* and *This Is Me*, from the hit movie *The Greatest Showman*.

A choir of vocalists from secondary schools around the region raised the roof with glorious background voices and beautifully complemented a duet by LACs Paris and Graham during *Adiemus* from Songs of Sanctuary.

Throughout the two-hour performance, guest compare Andrew London introduced each act and entertained the audience with hilarious, often personal stories, of his own musical career.

The band’s percussion group once again thrilled the crowd with *Crash Bash* and *A Brazilian Affair* and bagpiper Flight Sergeant Murray Mansfield filled our souls with masterful playing.

The band’s expertise was also showcased by soloists Corporal Byron “Buzz” Newton on the euphonium, Leading Aircraftman Blair Latham on the bass clarinet and Leading Aircraftman Michael Taylor on his trumpet and guitar.

A sweet moment punctuated the performance. About halfway through, FLTLT Gallaher announced the winners of a competition for playing percussion on stage. Tim Fa’alogoa and a confused-looking Corporal Janice Anderson made their way up, but it turned out to be a ruse as Mr Fa’alogoa knelt on one knee and proposed to his partner, who, to the audience’s delight, said yes.

The show climaxed with the entire band ensemble, soloists, drumline and Andrew London belting out John Farnham’s *The Voice*. It was a spectacular finale to a wonderful show, which brought the audience to its feet.

Congratulations on your inaugural Air Force Band concert FLTLT Gallaher – a brilliant start to a hopefully long and distinguished career as our Music Director.
Flight Lieutenant (FLTLT) David Gallaher, who started his working life as a primary school teacher, said he fell into music directing by accident.

The Air Force’s new Director of Music was in control of the band’s popular annual Air Force in Concert and was delighted his first big show was in the Michael Fowler Centre. “After four years in the smaller Opera House and St James Theatre, I think it’s time we moved back to Wellington’s premier concert venue,” he said.

After attending St Paul’s High School and Otago University in Dunedin, FLTLT Gallaher started a career as a primary school teacher in Southland. “The Department of Education needed a brass teacher/band director for several high schools in the region and there was nobody in the region with the necessary skills or availability. So I began learning on the job!”

Then he became a music conductor by accident. “I was working with a school group and someone passed the comment that I should pursue music directing in earnest,” he said.

“I was very fortunate to work with some wonderful musicians, such as Ken Smith, Mervyn Waters, Peter Swartz and Professor John Ritchie, who mentored me along the way.” After a distinguished music career in this country, which included touring Europe with the National Band of New Zealand in 2005, he was inducted as a Member into the New Zealand Order of Merit in 2010 for services to music and moved to Australia soon after.

While there he worked as Director of Music at St Joseph’s College, in Geelong. However, when the RNZAF Band Director of Music position became available earlier this year he couldn’t resist the chance to move his family back to New Zealand, to start a new era leading one of only two professional symphonic bands in New Zealand.

“The opportunity to conduct the best symphonic band in New Zealand was too tempting to pass on,” he said.

“The band is full of brilliant musicians, with skills across orchestral, band, jazz and contemporary genres, who aspire to perform at the highest levels of musicianship.

“Returning to New Zealand had been in our minds for the past couple of years and the opportunity to give back to New Zealand music through the RNZAF Band presented a wonderful opportunity.”

New Music Director Brings Fanfare
The New Zealand Defence Force is introducing a new approach to tackling substance misuse in the armed forces. Under the banner ‘STAND’, the new substance harm minimisation framework is aimed at preventing impairment in the workplace and providing support to those who need it.

By ‘misuse’ we mean when it is illegal, harmful, or causes impairment while at work. Our Air Force has an interest in the misuse of substances by personnel as substances can impair individuals, create risks, be unsafe, and damage trust, morale and organisational reputation.

STAND has identified that impairment from substance misuse is a major risk to the health and safety of our organisation and must be minimised through all mechanisms available. We are taking a more comprehensive approach including prevention, support, treatment, rehabilitation, reintegration, deterrence, detection, and enforcement.

Our people have told us they want a more consistent approach – a sailor, soldier, airman, or civilian should all understand the NZDF’s position, and expect to be treated in a similar way. The new framework has at its foundation that substance misuse is incompatible with service, and all breaches will have consequences. While leaders have acknowledged that retention, treatment, and re-integration of personnel is a preferred outcome, this cannot and will not be at the cost of Force and unit safety.

We acknowledge that there is a tension between being supportive and compassionate and holding each other accountable when expectations are not met. STAND is about ensuring we show each other support and compassion, without changing the high standards that are expected of all of us.

**THE NEW STAND SUBSTANCE HARM MINIMISATION FRAMEWORK WILL:**

- shift the policy focus by placing a greater emphasis on promoting health, preventing impairment, and providing support for those who need it;
- improve responses, streamlining help and support services, and removing barriers to access; and
- improve monitoring and evaluation, with better data and analysis of this to target responses.
Medics Prepared to Deploy

By Captain David Barber,
Aviation Medical Unit

The New Zealand Defence Force has 12 newly trained Air Force and Army medics and nurses who are prepared to deploy as part of an Aeromedical Evacuation (AE) team. The team has been prepared to provide NZDF AE operations in environments such as disaster relief missions in the South Pacific.

The course was run by the Aviation Medical Unit (AMU) for the Directorate of Air Safety and Health (DASH). DASH works to deliver safe and effective military air operations. There are inherent dangers that are especially relevant when transporting the sick and injured by air.

Officer Commanding AMU Squadron Leader Gus Cabre said aeromedical evacuation was a crucial capability for any expeditionary force and was key to maintaining interoperability with allies.

This team completed their training over three weeks at Whenuapai and Ohakea. The AE course included training with fixed-wing and rotary-wing aircraft, with No. 40 Squadron and No. 3 Squadron.

This included practical training and simulation, on the ground and in the air. In the last days of the course the team flew multiple missions. The missions included evacuating mass casualties and working at night.

The aim of the course is to prepare NZDF health personnel for the dynamic aviation environment. AMU did this by teaching about crew recourse management, the use of flight-rated AE equipment, conducting movement of the AE patient and providing clinical management. AMU is planning to run the course again early next year.

Leading Aircraftman Tessa Black

The aeromedical evacuation (AE) course was a great opportunity to solidify my existing knowledge and continue learning about aeromedical evacuation, work with new people, and to work outside my comfort zone.

We were lucky to get a flight in a Hercules, where we simulated an evacuation of 20 patients after a natural disaster. The flight highlighted the difficulties of treating patients in a small and congested space, while also considering the stressors of flight, our allocation of resources, and the challenge to communicate effectively due to noise and vibration. Following this, we changed platforms to the NH90. This meant less space, smaller teams, and more consideration for securing patients while under time pressure.

Night flying was a chance to learn signalling to an aircraft with glowsticks and experience working under low light. For me, the most valuable learning point was the importance of having a plan and roles allocated before we got on board the aircraft. This helped our scenarios run smoothly when communication was difficult. This opportunity has put our course in good stead to continue growing as medics, striving for the pinnacle of our medic careers. I’m excited for the future of this capability in the NZDF.
The Royal New Zealand Air Force has made changes to its pilot training programme because of a global shortage of ejection-seat components temporarily reducing the availability of the T-6C Texan training fleet.

Some key components of the Texan ejection-seat system – cartridge-actuated devices and propellant-actuated devices – are in short supply globally. This shortage has arisen because of the reduction of the safe operating life of the components by technical authorities, combined with production challenges being experienced by the manufacturer.

The global shortage means delivery times for orders already placed have been extended. The Air Force is working with its commercial partners and allied air forces to source alternative components. A batch was delivered through our commercial partners in September and a second batch from an allied air force late last month. This has provided some relief but resolving the situation will take some time.

The affected ejection-seat systems are being removed from service as they reach their end of safe life, thereby temporarily reducing the number of aircraft. The availability of aircraft is expected to return to normal levels next year.

Chief of Air Force, Air Vice-Marshal Andrew Clark, said while the Air Force was operating a reduced Texan fleet, adjustments would be made to the flying programme to maximise training outputs.

“However, the reduced fleet availability means the RNZAF is currently unable to run two full pilot training courses concurrently. We started a flying instructor course as planned in September, and we will look to return to full pilot training output as new parts are received and more aircraft return to service.

“Our priority is ensuring the safety of our flying training operations and our people while we work through this temporary logistical challenge.”

Until the component shortage was resolved, pilot training would be prioritised over display flying, he said.
I was lucky enough to be selected recently to participate in a one-week Tour of Duty with the Warrant Officer of Air Force, Warrant Officer (W/O) Toni Tate, in Wellington. The purpose was to enable a junior rank to have exposure directly with RNZAF and NZDF strategic areas and to understand the Wellington RNZAF HQ role and portfolios. It was to help break down barriers and perceptions of the Wellington HQ environment.

The week started with attending the Chief of Air Force’s Weekly Meeting, where commanders from all Bases met via video conference and discussed issues and upcoming events. From there we attended the Battle of Britain church service at the Old St. Paul’s Church. After the service we travelled to Trentham to meet the Joint Warrant Officer’s Advanced Course participants, who had started their course that day.

The following days were a familiarisation with various portfolios such as Defence Public Affairs, Defence Careers Management, Executive Logistics Management Team, and other Air Staff sections. I was unsure how a junior rank would go in such a high-level environment. However, I was really impressed by how everyone was so positive, encouraging, and happy to explain their roles. This included the Deputy Chief of Air Force, Air Commodore Mark Brunton, who briefed me on Air Staff outputs and responsibilities. I was able to ask questions and really get an understanding of the various portfolios throughout the Air Force.

One day was set aside to travel to Woodbourne to meet the current recruits, who were in their first week, and the Corporals Promotion course, who were in their last week. While W/O Tate presented me with the WOAF coin, which was fantastic but unexpected!

A highlight was the Chief of Air Force (CAF), Air Vice-Marshal Andrew Clark, introducing me to the Minister of Defence, Ron Mark, at Parliament, plus a behind-the-scenes tour of Parliament House. Another highlight was being able to sit down at the end of the week with CAF and discuss what I had observed over the week.

This experience was very beneficial, not only to gain a better understanding but to be able to speak up on behalf of the junior ranks – to let them know that they do have a voice and that our commanders, even at the highest level, are interested to hear what we have to say.

Finally, I just want to say a huge thank you to everyone involved. They made my week in Wellington informative and above all thoroughly enjoyable and I highly recommend this experience to anyone who gets the opportunity in the future.
This year the NZDF Women’s Leadership Group held the Women in the NZDF Forum at Base Ohakea with about 80 selected delegates ready to take on the call to action of Fully Engaged and Fully Integrated. One of the key outcomes of the Forum was to review the current Women’s Development Steering Group and devise a recommended structure and purpose going forward.

In his address to the group, Chief of Defence Force Air Marshal Kevin Short reinforced the fact that diversity was important to the future of the Defence Force.

“The whole Executive Team is here, which shows you have our attention.”

He tasked the delegates to reflect on what has been put in place so far and to challenge the work that had gone on to date. “Are these the bold interventions we need and are they bold enough?”

Women’s Development Steering Group Chairperson Captain Maxine Lawes, said that sometimes change seemed to happen slowly and direction could be lost so constant reflection was required to ensure we stay on course.

“We want everyone to experience the same NZDF; an organisation where everyone feels valued and respected and has equitable access to opportunities”, she said.

Speakers from all services and the NZ Police spent the first day setting the scene for what had been achieved so far in making the NZDF a safer and more respectful workplace; one of the big ticket items was making sure cultural change continued to happen. Captain Corina Bruce emphasised that it was important to recognise that, while positive change needed to occur for some groups of people within NZDF, it should not happen at the detriment of others. “We must ensure that empowerment to one group of people does not become detrimental to the others.”

She said the programme Wāhine Toa (formerly the More Military Women Programme) had achieved great work and she was pleased to see a Tanē Toa programme on its way to being launched.

Director Force Management Lieutenant Colonel Jay McLeary highlighted that in the past some initiatives such as integrating women into combat roles hadn’t been executed well. “We didn’t prepare units well and didn’t give the women initially involved in this initiative the best chance but we are doing it better now. The Female Engagement Team has paved the way for that.”

Erica Dill-Russell, Research Scientist at Defence Technology Agency and former soldier, said the Female Engagement Team was vital for winning the war on the ground.

“We need this capability as an all-male force does not allow us the ability to gather certain intel.”

What also became apparent over the two days was an overwhelming and positive acknowledgement that achieving a better representation of women across all of NZDF was a challenge and would take time, but with commitment and more bold actions, it was possible.

The key themes that became apparent through several workshops will now be developed and presented to the NZDF Executive Team.
More than 40 military medics from the New Zealand Defence Force (NZDF) competed against each other in the historical Waterhouse Trophy competition at Linton Military Camp recently.

In the competition, designed to challenge the physical and mental components of military first aid, teams of four people from the Air Force, NZ Army and Royal NZ Navy competed for honours and bragging rights in the annual competition.

The competition originated during World War II and was held in Wellington between sub-units of the 13th Field Ambulance unit.

It includes memorial trophies dedicated by the families of the Royal New Zealand Army Medical Corps medics who have been killed on military operations.

The teams, comprising regular and reserve force medics from a range of NZDF units, were required to complete a number of physical and written first aid training scenarios, with the team that performed the best throughout the competition awarded the Waterhouse Trophy and the honour of top NZDF first aid team.

This year that honour went to Defence Health School’s Team Two.

Lieutenant Colonel Paul King, Commanding Officer of the Deployable Health Group, said the teams were tested in scenarios that reflected a contemporary operational environment that included modern threats and injury patterns. “The competition has been organised with the aim of providing memorable and challenging environments for both individuals and teams,” Lieutenant Colonel King said.

“This is our bread and butter for our medics. Most importantly, it provides an excellent opportunity for all of the medics across the Defence Force to come together and measure themselves against each other, have fun and enjoy the camaraderie of the competition.”

It was a great reason to get all the medics together in one place, he said.

“The competition tested their technical competence, resilience, adaptability, teamwork and leadership.”
At 11am on 11 November, 1918, four years of devastating conflict ended. World War I cost an estimated 10 million lives worldwide. About 55 per cent of the 100,000 men who embarked with the New Zealander Expeditionary Force were casualties – 16,000 were killed and 40,000 were wounded. More than 20 per cent of the 350 New Zealanders who engaged in operational service with Britain’s Royal Flying Corps or Royal Naval Air Service were also killed. The effects of war were felt for generations, and the names of Gallipoli and Passchendaele became entrenched in the national memory.

Online Cenotaph, developed by Auckland War Memorial Museum, is the nation’s online war memorial and a database recording New Zealanders who served in conflict. It has become an internationally recognised name for commemorating or researching New Zealand’s service personnel. Attracting more than 1 million users in three years, Online Cenotaph is increasingly being visited as a form of remembrance on Anzac or Armistice days.

Online Cenotaph excels at detailing individual New Zealanders’ stories. For example, Lieutenant James Dennistoun, a sheep farmer from Timaru and mule driver for Captain Scott’s British Antarctic Expedition in 1910, made his own way to the United Kingdom at the start of the war to be commissioned into the North Irish Horse unit. In 1916 he transferred to the Royal Flying Corps. Six days later, on his first operational flight with No. 23 Squadron, he was shot down. He died of his wounds at Ohrdruf camp on 9 August, 1916. During World War II, LAC William George Coleman enlisted with the RNZAF on 29 June, 1942, at the age of 71. An experienced military man, he had served in the 4th Irish Dragoon Guards since 1891, fighting on the North West frontier of India, the South African Wars and World War I. He was discharged in 1944.

Even as the WW100 period ends, Online Cenotaph will continue to honour those who served. Further research and public contribution will allow us to create profiles for those who served in overseas units or the Royal Navy and Royal Flying Corps. It is expected that by the time of the 100th anniversary of the start of World War II in 2039, a significant number of profiles will also have been added from the 1939-1945 period.

Online Cenotaph is not solely for memorialising the dead – it is also about recording the experiences, service and sacrifice of those who returned. Increasingly the focus after the centenary period will be to build representation of service personnel from campaigns after 1945. Working directly with veterans and their families, particularly from the Korean War, Malayan Emergency, Borneo and Vietnam, we will create a complete digital record of all who served this country and make it accessible in perpetuity for future generations.

For more information go to www.AucklandMuseum.com/cenotaph. If you would like a record to be created for someone not recorded on the database, please contact 09 309 9443 ex 7074.

By the numbers

- Details 236,000 people, living and deceased, who served in conflict
- Documents 104,000 people serving during WWI, 126,000 from WWII, and more than 5,000 from other conflicts from the South African Wars to Afghanistan
- More than 410,000 digital poppies have been laid on the roll of honour
Remembering Thérèse

By Michelle Sim, Communications Manager, Air Force Museum of New Zealand

The long-serving Director of the RNZAF Museum, Thérèse Angelo MNZM, was farewelled last month in a fitting service at the Museum she loved so much. She passed away on 15 October following a long, and brave, battle with illness.

Thérèse has left an indelible legacy across three decades of service to the RNZAF. Having joined the Museum as its first Research Officer, just two months after it opened in 1987, she rose to become the first civilian Director in 2002. Since then, she has forged a path for the Museum which has taken it to its present position – an internationally respected institution which shares the story of our Air Force with over 130,000 visitors every year.

Her list of achievements is impressively long. She was honoured with CAF and CDF Commendations, national museum achievement awards, aviation and training industry awards and civic recognitions, culminating in her being made a Member of the New Zealand Order of Merit in 2011 for services to museums. On top of this, she oversaw a number of major works projects which transformed the Air Force Museum into a world-class facility, the pinnacle being a $16 million, 7,500 sqm extension, completed in 2013.

Thérèse’s greatest legacy of all, however, may be seen in her generous guidance and selfless support of others. This was strongly evident in her response to the Canterbury earthquakes of 2010/2011. With the Air Force Museum being in the fortunate position of having suffered very little damage, Thérèse never hesitated in offering assistance to others less fortunate. With the Board’s full support, she opened the Museum’s doors to displaced organisations, sent her team to help salvage a number of affected heritage collections, and, following the opening of the new extension, made space available for ‘homeless’ cultural and heritage organisations to temporarily store, and work on their collections.

In the words of a fellow director, Thérèse was a ‘powerhouse’ of the museum sector in New Zealand. There are few leaders who have had such a far-reaching influence across an entire industry, and her loss is deeply felt. Not only did she head national heritage bodies, including three terms as Chair of Museums Aotearoa, but she also generously supported and mentored countless individuals in their careers, many of whom owe their own achievements to her inspirational guidance.

She was tirelessly loyal to the RNZAF, too, always striving to ensure that the Museum supported CAF’s command directive, and that it was recognised as an integral part of the RNZAF; its own whare taonga – a house of treasures, and collective memory. Under her leadership, the Museum became an institution with people at its core; not only in the stories that are told within its galleries, but also in its inclusive, visitor-centric focus, sharing the RNZAF story with an ever-expanding audience. Thérèse’s emphasis on people extended to her own team, and anyone who has been part of that close-knit, passionate group of staff and volunteers will remark on how special the unit culture is at Wigram - in itself a testament to her leadership.

As the Museum moves forward now into a new chapter, we will strive to honour Thérèse’s legacy while also looking to the future and embracing new opportunities, just as she would have wanted.
Most of the trade-related qualification programmes undertaken by Air Force personnel are done in the workplace, with the support of their own trade NCOs and the New Zealand Defence College Defence Qualifications team. This workplace approach uses real-life, on-the-job experience to make the qualifications relevant to the individual and the employer, while placing as little extra work on the workplace as possible to meet the qualification requirements.

“Our commanders are very supportive of personnel undertaking formal qualifications and in the case of my trade there is time set aside after your mechanics’ course to get this Level 4 qualification done,” LAC Mortimer-Jones said.

Regular catch-ups with Defence Qualifications mentors throughout the programme provided support to those studying and enabled conversations about progress, challenges and highlights, she said. The support provided to her was great to keep her motivated and on-track to complete the modules.

Wing Commander (WGCDR) Murray Simons, from the New Zealand Defence College, said the ‘Excellent’ rating awarded by NZQA was important because it validated the strong structure of the courses and the support provided to personnel to succeed in their careers.

“Student progression and achievement for all military training courses is monitored within each of NZDF’s three Services and results are collated through annual dashboard reports. Recent results show consistently high course achievement. Overall course completion rates for 2017 were 99 per cent for the Navy and Air Force and 95 per cent for the Army,” WGCDR Simons said.

“Many of the learning requirements are unique to each military Service. Training courses provide students with a broad range of skills, knowledge and attributes that prepare them for their role in the service, as well as further study and career progression.”
General Engineering Officer Training – On An Upwards Trend
by Flying Officer Blake de Raat

General Engineering Officer Training (GEOT – pronounced JEE OTT) concluded recently at Base Woodbourne, with the latest batch of engineering officers graduated, ready to move into a variety of roles across the organisation.

This year’s GEOT has reaped the rewards of years of continuous improvement, and complete ownership by the RNZAF Engineering branch to ensure that the training received by the students is relevant and up to date to meet the requirements of the model RNZAF Engineering Officer. GEOT is very much a niche, specialist course and as such no external organisation alone can deliver such an RNZAF-focussed course of professional learning.

The bulk of the GEOT syllabus is provided by Nelson Marlborough Institute of Technology, where the primary aim is to ensure that, regardless of engineering discipline and background experience, we all leave with the same high-level understanding of aircraft systems, mechanical and avionics.

Throughout this section of the course each learning module was consolidated by visiting engineering branch Squadron Leaders, where we were exposed to real-life scenarios and challenges faced by Air Force engineers on a day-to-day basis. This involvement from the engineering branch was invaluable in developing us professionally and preparing us for the final assessment, Exercise Fusion.

Exercise Fusion is, without a doubt, the highlight of GEOT for all involved – an opportunity for us to showcase for the first time our engineering nous as Deputy Maintenance Flight Commanders (DMFC). For two weeks the Ground Training Wing is taken over as the Logistics Training School and is transformed into 75(T) SQN, operating an eclectic blend of SH-2F Seasprite and Strikemaster aircraft.

We are then thrown into the deep end, having to apply for delegated engineering authority, which we then exercise over the two-week period as DMFCs on duty. It quickly became apparent that this was the best way to learn – nothing could have prepared us for the myriad of personnel and maintenance issues that we faced. However, it was the experience of facing them that counted for the most – mistakes were made and lessons were learned. While only an exercise, they were real-life type scenarios and as such everyone was very committed to making sure we, the future engineering officers, got the most out of it, which we certainly did!

So, what did we gain from the course? As a cohort, friendships and connections for the rest of our careers. As engineering officers, understanding how we contribute to safe military air operations, along with the professional expertise and real-world exposure that has prepared us for our future workplaces.

Lastly, we can’t reiterate enough that with the efforts of the branch and Staff Officer Engineering Training, Steve Holmes, GEOT is continuously evolving for the better.

The challenge to next year’s course is to keep the momentum going!

FLT Lt Cody Clarke – Aircraft Maintenance Squadron
Jack Hardy Memorial Trophy, Top Student

FLT Lt Darryn Bosher – Non-Destructive Testing

FLT Lt Imran Shaikh – Engineering Support Flight

FLT Lt Philip Driver – Compliance Assurance Unit

FGOFF Rob Hutton – Technical Training Flight

FGOFF Alan Butler – Structural Support Unit

FGOFF Oscar Barkle – Directorate of Project Engineering and Certification

FGOFF Aj Sasidharan – Technical Support Boeing 757

FGOFF Blake de Raat – Directorate of Project Engineering and Certification

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INAUGURAL NZDF DRONE RACING TEAM ON INTERNATIONAL STAGE

By Rebecca Quilliam
The New Zealand Defence Force has put together an integrated team to compete in the inaugural military international drone racing tournament, held in Sydney, Australia in support of the Invictus Games. Six teams competed in the event and the rivalry was fierce. In the end the NZDF team took third podium position and the team's captain came third individual, delighting the organisers, but Australia took out the lion's share of the prizes.

The sport itself started in 2014 and countries like Australia have embraced it and recognised the benefits for the organisation.

Major Grant Palmer, speaking before the team left for the competition, said it was important the NZDF engaged early and became “fast followers” of the Australian-led initiative.

“A sporting approach brings a competitive edge to enhance the development and professional focus in a military context for this technology. The skill set brought about by drone racing is what we will require for tomorrow’s soldier, airman and sailor as we move into the A3I (Autonomous, Automated systems and Artificial Intelligence) realm.”

The team was practicing for the tournament at Trentham before flying out to Sydney.

Lieutenant Colonel (LTCOL) Dave Thorsen said the level of interest and enthusiasm around the drones, also known as remotely piloted aircraft system (RPAS) or mini-quads, was different, new and exciting “and it will have a flow on effect of better preparing us for the robotics and autonomous systems age”.

“To get the best out of these devices is something special and to be able to leverage that technological experience with these small devices, we think will pay real dividends with the surveillance RPAS that we will be buying in the fullness of time.”

LTCOL Thorsen also noted what the activity provided to the next generation who were specialising in science, technology, engineering and maths subjects. “The recruiting and goodwill opportunities that the ADF are experiencing with their racing RPAS programme is a great example that we can easily emulate.”

Australian Defence Force (ADF) Warrant Officer Class 2 Sue Osborn said the benefits the ADF was seeing from their own work with RPAS was recognising that they encouraged people to think on their feet and react to a fast environment.

“For something that’s a relatively fast-growing sport, it’s those skills that we are looking for in the 15-year-olds, because it’s those kids that demonstrate this skill set that in three years’ time we want in our military.”

The pilots’ reaction time has to be pretty swift, with the devices flying up to 150km/h.

Corporal Joshua Gennills works in avionics on NH90s at No. 3 Squadron.

“In avionics we do a whole heap of soldering courses and that’s a big part of assembling these. There’re heaps of voltages that you’ve got to check to make sure they’re going the right way and phases to make sure the rotors spin the right direction. My training probably did help quite a bit,” he said.

“This course we’ve got set up out here is pretty similar to what we’ve got in Australia. There’re heaps of flags to zigzag around and gates to jump through.

“The competition will be awesome, I’m pretty excited.”

Team captain Kevin Mackenzie said the competition involved “very tight tracks through arches and around flags”.

“A lot of the time it can come down to who stays in the air – because you can crash pretty easily. So it pays to have a cool head, take the track slowly and make sure you finish. You don’t necessarily need to be the fastest.

“I’m very excited to see how all the other military teams from around the world operate and more importantly how we can grow this sport within the NZDF, potentially hosting an event here.”

Tim Jones from Defence Innovation and Centre of Excellence (DICE) said they were happy to fund all the equipment and software for the racers and willing to support these “forward thinking” activities in the NZDF.

“The efforts of MAJ Palmer and the team are an awesome example of organisation courage leading innovation and we are here to support and resource that organisational courage.”

The United Kingdom Defence Force has been given the challenge to host next year’s event.
Big Opportunities in 1st XV Team
By AC Dante Henry

The RNZAF 1st XV men’s rugby team recently competed in the Inter-Services Tournament against the Army and Navy for the King George Cup. As a trainee at Woodbourne, obtaining approval while on course is rare for Inter-Base sports, let alone RNZAF representation at Inter-Services level. For this to work an agreement was made where I would spend my mornings in class learning, and my afternoons on the field, soaking in as much as I could from the coaches and senior players.

Our goal was to be victorious on home soil, while being welcoming hosts and keeping morale high. Our first game was against the Navy. After a solid game we took the spoils, 27-12. After a day’s recovery the boys were refreshed and confident going in to the final against the Army. Hard defence and strong running from our midfield backs, Acting Corporal (A/CPL) Patrick Tafili-Reid and Devon Scott, gave us the upper hand for the whole game. However, just as the full-time hooter sounded Army scored a try and the conversion brought the final score to 10-10. Army kept the King George Cup on points differential.

After the games all players came together to celebrate a great week of rugby, to congratulate those who received awards and those named in the NZDF squads. I would like to give special congratulations to the women’s MVP, Leading Aircraftman Hayley Hutana, and Under-23 player of the tournament, Aircraftman Isabel Whitaker, who both join Aircraftman Ashleigh Nathan in the women’s NZDF team.

Men’s MVP and Back of the Tournament, A/CPL Tafili-Reid, was joined by Leading Aircraftman Ethan Bartle, Corporal Sam Cadman, Corporal Chris Lynch, Devon Scott and Corporal Blair Paterson in the Men’s NZDF team.

I would like to thank our sponsors, CAE, Beca, SG Fleet, Mitre 10 Westgate & Henderson, Marops, and Heathcote Appliances for their ongoing support. Finally, I would like to thank everyone at LTS, who gave a helping hand and allowed me the opportunity to represent the Air Force in the sport I love. Without your help this would never have been possible. Hopefully in the future I will get to see more trainees at Inter-Service tournaments.

Inter-Service Women’s Rugby Tournament a Week to Remember
By AC Dazza Greenfield-Snellaert

For the first time in five years the New Zealand Defence Force was able to hold an Inter-Service women’s rugby tournament. The week brought a lot of new experiences, each with their own challenges. An example of this was playing 12-a-side for the Thursday matches and transitioning to 15-a-side on Sunday, where we played as two tri-Service teams, going head to head in an exhibition match.

We were joined by the Royal Australian Air Force women, who helped boost our numbers. This enabled us to have a different point of view on tactics, set piece and strengths.

The highlight of the tournament for me, apart from the rugby itself, was being invited to sit at the head table at the final function. It was a huge privilege to be able to sit with then Chief of Army Major General Peter Kelly, as well as the Sergeant Major of the Army, WO1 Clive Douglas.

The experience overall was definitely a memorable one. The support, encouragement and patience of the coaches and managers was pivotal in the development of our players, as individuals and as a team.

Seeing these women come together through injury, perseverance and comradery highlighted their commitment to our national sport and to their Service.

At the close of the tournament I was to be posted to Whenuapai. Along with many others at the tournament, I was fortunate to be transported by one of No. 40 Squadron’s Boeing 757s. This was really the icing on the cake, as I soon discovered the skill and capabilities of the Boeing 757 and its crew from their short, sharp take-off from Woodbourne’s 4,675ft runway.

Registrations of interest to join the great group of rugby women for experiences like this can be made to Pilot Officer Holly Shaw.
Silver Medal for Air Force Rugby League

By Squadron Leader Greg Pryce

Inter-Service rugby league was hosted at Base Ohakea recently, with all three games played to a high level under the baking Manawatu sunshine. Former Kiwi and Newcastle Knight Tony Kemp, who attended the tournament, was impressed with the skill level and speed of the games.

The Army proved to be too strong for the Air Force and Navy teams, dominating the second half of both games to reclaim the Mad Butcher Inter-Service Trophy from Air Force.

Air Force defeated Navy 46-24 to place second, while Navy was awarded the Magpie Trophy for sportsmanship. Hard-running Aircraftman Gene Roberts was named tournament Rookie after two very strong performances. Despite announcing his retirement, Air Force captain Matty Cole was named in the NZDF squad.

The following players were also selected in the NZDF squad: Sergeant Mala Tepania, Leading Aircraftman Malu Leaula Faalogo, Devon Scott, Corporal Cole Waaka, Corporal Paddy Tafili-Reid, Leading Aircraftman Jason Lupo, Corporal Cam Nicholas and Aircraftman Gene Roberts.

Thanks to Sergeant Tash Wineera for her tireless work as the Air Force team manager, to Simon Tasker, who officiated throughout the tournament, and to Base Ohakea, for hosting a great week for all participants.
Air Power Development Centre Quiz

Q1: What is a pickle switch?

A1: An aircraft bomb release switch is often called a pickle switch. The name hails from WWII, where it was popular to claim that aircraft equipped with the Norden bombsight could hit a pickle barrel from high altitude.

Q2: Who was the first member of the RNZAF to be awarded a combat decoration in the Pacific War?

A2: Flying Officer Gudsell, a 3 SQN pilot, was awarded the US Air Medal within days of the deployment commencing.

Q3: The French armed forces are dependent on what airlifter type to project their forces?

A3: The AN-124 with 100 tonnes of payload. France notes its dependence on Russian heavy-lift aircraft. Its smaller 20-30 tonne class aircraft are too few, and require up to four airlifts to one AN-224.

Q4: What was the first jet aircraft to come to New Zealand?


Q5: Describe the Royal Thai Air Force roundel.

A5: Five rings from the outer ring to the inner circle: red, white, blue, white, red.

Q6: Name two mission sets of the air power role of Control of the Air.

A6: Offensive Counter Air (OCA) mission set, and the Defensive Counter Air (DCA) mission set.

Q7: What is air superiority?

A7: That degree of dominance in the air battle of one force over another which permits the conduct of operations by the former and its related land, sea and air forces at a given time and place without prohibitive interference by the opposing force.

Q8: Which was the first RNZAF squadron to enter into combat against Japanese forces during World War Two?

A8: 3 SQN in Guadalcanal, November 1942.

Q9: What was the first jet aircraft operated by the RNZAF?

A9: The Gloster Meteor demonstration aircraft that visited in 1945 was received into the RNZAF in 1946 as NZ6001. 56 pilots were trained on the aircraft.

Q10: Who said: “Aviation tends to attract adventurous souls, physically adept, mentally alert and pragmatically rather than philosophically inclined”?

A10: Winston Churchill.

Think you can stump our readers?
Email quiz questions to APDC via ohapdc@nzdf.mil.nz

Notices

SURVEY ON VETERANS’ PHYSICAL AND MENTAL HEALTH

A survey to understand how personnel with operational service since 1 January 1991 are doing both mentally and physically, is being conducted by the University of Otago and Massey University.

The information will be used to design better screening tools to help medical practitioners identify issues and provide greater understanding of the needs of current and former service members.

Thank you to all who have already completed the survey already. If you did not get a chance to complete the survey yet and would like to, copies are now available in all DSSG offices or online https://www.otago.ac.nz/veteranshealth.
It’s at times like these when you realise why the mighty Hercules is so good at what it’s designed to do. Landing at Palu airport with part of the runway damaged, and FOD (foreign object debris) strewn all over the airfield, we were able to get in and out quickly to deliver aid and to take quake victims out of the area to safety. This photo was taken when many other nations’ Hercules aircraft were constantly arriving and departing to help out with the huge disaster response in Indonesia. It makes me so proud of our country that we were part of this response.

Photographer, PO Chris Weissenborn

**Photo Of The Month**

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**NO. 42 SQN 75TH ANNIVERSARY FUNCTION**

We are holding a 75th Anniversary Function at RNZAF Base Ohakea on Sat 01 DEC 18 to acknowledge 75 years since the formation of No. 42 SQN RNZAF.

Limited tickets will be available. Interested ex and current 42 Sqn personnel who wish to attend this event are requested to register interest by emailing 42SQNPIGEONOPS@nzdf.mil.nz

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**AP CALL FOR PAPERS**

The Air Power Development Centre is calling for air power related essays for the RNZAF Journal.
E-mail ohapdc@nzdf.mil.nz for more information.

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**NO. 41 SQUADRON NOTICE**

No. 41 Squadron RNZAF 2019 reunion registration is now open.
The reunion will be held in Christchurch April 12-14, 2019.
For ex-squadron members, registration forms are available from: 2019 Reunion Committee, C/- 4 Chesterfield Place, Rangiora, Christchurch 7400, or via email: alandbazb@gmail.com.
YOUR ENTITLEMENTS:

If you are RF make sure you check out your eligibility to posting entitlements.

**DISTURBANCE GRANT**
Refer to DFO 5, Chap 4: Removal Expenses

**HOUSEHOLD REMOVAL LEAVE**
Members may be granted up to four working days ‘Household Removal Leave’. Refer to DFO 3, Part 8, Chap 8: Leave (Military)

**TRANSIT ASSISTANCE**
Assistance towards travel, meals and accommodation while you relocate. Refer to DFO 5, Chap 4: Removal Expenses

**REAL-ESTATE ASSISTANCE**
Assistance is available for home owners, including agent commission fees, advertising costs and auction fees. Refer to DFO 5, Chap 4: Removal Expenses

**TRANSPORT OF PERSONAL EFFECTS**
The cost of moving and storing your personal belongings will be supported. Refer to DFO 5, Chap 4: Removal Expenses

**DISCOUNTED REAL-ESTATE SERVICES**
Contact NZ Realtors Network Ltd
Donna Peffers
021 505 485
donna@nzrealtors.co.nz

Defence Shared Serves Group
HR Tool Kit
DSSG Military Posting booklet

A FORCE FOR NEW ZEALAND