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The RNZAF will provide New Zealand with relevant, responsive and effective Air Power to meet its security interests.

OUR VISION

An agile and adaptive Air Force with the versatility essential for NZDF operations.

COVER:

Aviator of the Year

PHOTOGRAPHER:

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- photos provided separate from the text - at least 300dpi.

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First Word



B | CHIEF OF AIR FORCE
Y | AIR VICE-MARSHAL ANDREW CLARK

"The key message from all of this is that we are continuing to deliver operations for New Zealand and making strides into our future, even as we adapt, regenerate, and adjust our tempo, and as we pursue remuneration and personnel policy improvements."

y any measure 2022 has been an extraordinary year – hot on the heels of two equally extraordinary previous years.

Covid still dominated the scene as we entered 2022, and the NZDF was fully committed to Op Protect, with a continued reduction of our regular activities. As MIQ duties wound down, transmission of Covid throughout New Zealand meant that your agility again came to the fore so that we could sustain essential operations.

As the year progressed, so did the nature of our challenges. The main dynamic became re-opened borders and economies, and a hot employment market competing for skilled professionals. Against a backdrop of increased living costs and stagnating NZDF remuneration settings, we quickly flipped from low attrition to high attrition.

The upshot of all of this rapid change is that, as we now draw a line through 2022 and look ahead to next year, we are still very focussed on our people – remuneration, regeneration, adjusting activity levels and making operational trade-offs, to ensure our ability to operate safely and professionally continues.

But of course we are the RNZAF and we continued to deliver on some key operations this year, as you would expect. We provided significant humanitarian and disaster support to Tonga following the devastating tsunami in January. This operation involved wide ranging NZDF assets and personnel, with the RNZAF providing air transport and logistics support in the contactless delivery of aid, surveillance and reconnaissance flights, and rotary support to local communications technicians.

Globally, New Zealand support to Ukraine has seen the RNZAF provide air logistics and transport support, intelligence personnel and liaison officers. Notable offshore training activities also resumed and Exercise Pitch Black in Australia, spotlighted in the October issue of Air Force News, provided the RNZAF the opportunity to develop our operational enabler trades alongside 16 other participating nations.

We also continued to deliver the RNZAF's future. The most high profile example is the arrival in New Zealand of the first RNZAF P-8A Poseidon this month, but other important work is ongoing. For example our first C-130J trainees will depart for the United States next month, maritime helicopter replacement work is progressing at pace, and momentum will soon pick up to address the Boeing B757 replacement.

As we wind up 2022, I want to thank all of you who make up our RNZAF team for the vital part you have played in delivering our operations, building our future, and adapting throughout our constantly changing environment. Thanks also to our Air Force families, our industry partners and our support networks. I wish you all a very Merry Christmas and a well-deserved break.



Two New Zealand Police utes were recently flown by a C-130 Hercules to Niue. Transporting large cargo is a common occurrence for the aircraft and crew, but the weight and unusual shapes of the vehicles meant the crew had to work out some hefty maths to make sure they stayed secure on the trip.

the Toyota Hiluxes were big, but the aircrew had dealt with bigger loads, loadmaster Sergeant (SGT) Dion Joblin said.

"But what we were looking at for the aircraft is the weight and balance, so to make sure they are in a position where the aircraft is in a balanced state for take-off and also for landing."

"We also take into consideration passengers and any other freight that we might be taking. So all of that weight has to be positioned in such a way that, along with the amount of fuel at the beginning and the end, provides safe take-off, safe cruise and safe landing for the aircraft."

When doing those calculations, there are three factors crew take into consideration: it can safely take off and fly with payload and required fuel for the trip; it can land after burning the fuel required for the trip (and still carrying adequate hold fuel in case of a divert); and it can land if an emergency exists and fuel is dumped down to the minimum amount to achieve a landing.

"The next big thing for us is securing the load and ensuring it is tied down to precise specifications," SGT Joblin said.

The vehicles weighed 5300lb (2404kg) each. The restraint factor is usually expressed in terms of G – in simple terms the force of gravity or acceleration on an object, he said.



LEFT & TOP MIDDLE Loading the vehicles onto

Loading the vehicles onto the C-130

BOTTOM MIDDLE & RIGHT

Preparing the C-130 for the flight to Niue



MAINT O

"For this flight we had passengers so the vehicles had to be restrained to a minimum of 8G forward (8 times their weight) 1.5G aft, 1.5G laterally and 2G vertically. This was achieved by using ten 10,000lb rated capacity chains to secure each vehicle to the aircraft.

"As the chains run in various directions and at differing angles, a formula is used to calculate the specific restraint value for each chain, in order to ensure we achieve the minimum restraint requirements. We use a basic trigonometry formula from one of our manuals, which calculates the actual length versus the effective length (due to the angle), and this gives us an accurate restraint figure for each chain."

The next factor the aircrew has to take into account is that the load is considered dangerous cargo because of the fuel in the tank, SGT Joblin said.

"They only had a couple of kilometres on the clock, but they had been driven and had petrol in the tank. So we had paperwork to fill in around that."

New Zealand police officers, in Niue on liaison roles met the aircraft at Niue's airport to collect the vehicles before a handover ceremony the following day.

"I guess it was quite a big deal bringing two Toyota Hiluxes to Niue – they are probably quite good for the roads being 4-wheel drives."

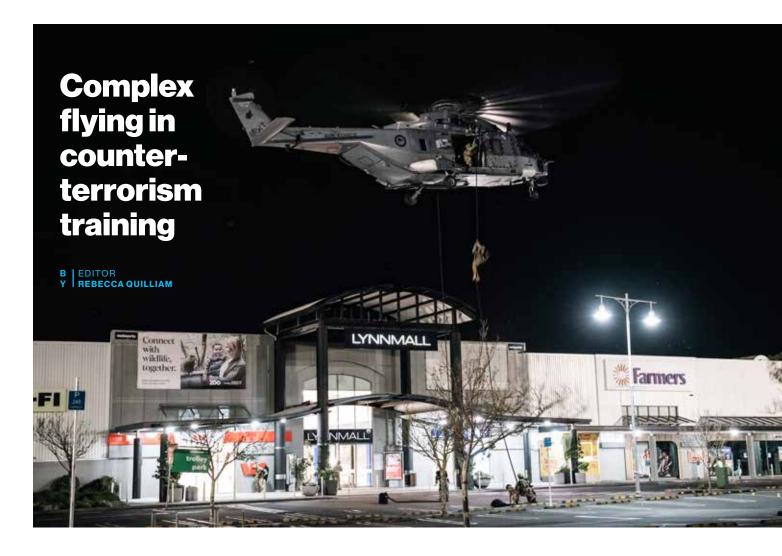
There was also a school visit to the C-130 by local school children, which "went down a treat", he said.

"It's always nice to go somewhere where you're helping someone. It's satisfying being a small part of a big operation and be able to help out."

The New Zealand Police have a close relationship with the Niue Police Force and, in conjunction with New Zealand Ministry of Foreign Affairs and Trade, donated the vehicles to assist them with their duties on the island and keeping the Niuean community safe.

"There were lots of smiles from the local people after we delivered the vehicles - they really loved to see the plane. It was quite a good side effect to being up there."

- Sergeant Dion Joblin



No. 3 Squadron counterterrorism training with the NZ Army's Special Operations Forces is complex and challenging. Doing it at night in an urban environment raises the stakes considerably. hree NH90s were involved in the week-long exercise in suburban Auckland.

NH90 pilot Flight Lieutenant (FLTLT) George Bellamy said the night aspect of the exercise "replicates the most complex nature" of our flying.

"During the mission at the front of our minds we are thinking about all of the hazards over a built-up area. Also, the effects the different lighting has on the night vision goggle (NVG) picture."

The aircrew need to build up a composite image of the area by looking through the NVGs and also looking underneath them when the light is bright enough, he said.

"This type of flying is challenging, but super rewarding as well. We did three assaults with the Army at different targets and we achieved qualifications for four loadmasters and one pilot qualification as well. It was really successful. "It's always good to work alongside the Special Forces as well," FLTLT Bellamy said.

Loadmaster Corporal (CPL) Jack Everett was one of the crew members earning his qualification for aerial delivery.

"It was primarily for fast roping and working with the soldiers in the back to make sure the fast ropers deployed quickly, made it down the rope safely and making sure the rope pulls away safely.

"Once everyone's out of the aircraft we drop the rope and we need to do it all as quickly as possible."

Throwing in night time and in an urban environment makes the exercise tricky, he said.



LEFT

Fast roping into an urban environment

TOP RIGHT

Special Forces personnel in training

BOTTOM RIGHT

A Military Working Dog taking part in the exercise in an NH90



"Working with SOF, building those relationships with them and getting to know them is really important - it's easier to work with your mates than complete strangers."

- Corporal Jack Everett

"One of the harder parts of it is to do composite scans underneath the NVGs. Looking through and underneath the NVGs you get different pictures of the two so you have to utilise a bit of both – especially when you're looking at the city and you know your target is in the middle of the city and it's just a sea of light. You've just got to trust that the planning that you've done is going to point you in the right direction."

Flying in an urban environment meant the aircrew needed to keep on the lookout for dangers including structures and wires.

The wires were pretty hard to spot, CPL Everett said.

"We knew where they were doing our pre-planning, but when we were flying over them, we didn't see them until we were at them. They were almost invisible and there were some tall ones around where we were and there were lots of cranes throughout the city that we had to make sure we didn't hit.

"It's definitely one of the most difficult and dangerous type of flying that we do. It's not often we have people unsecured in the back and let them slide down a rope," CPL Everett said.

It was beneficial working with the Special Operations Forces (SOF) team so they could be as prepared as possible during a real life situation, he said.

A SOF member said working with No. 3 Squadron teams to maintain and build on New Zealand's Counter Terrorism response package was essential for them.

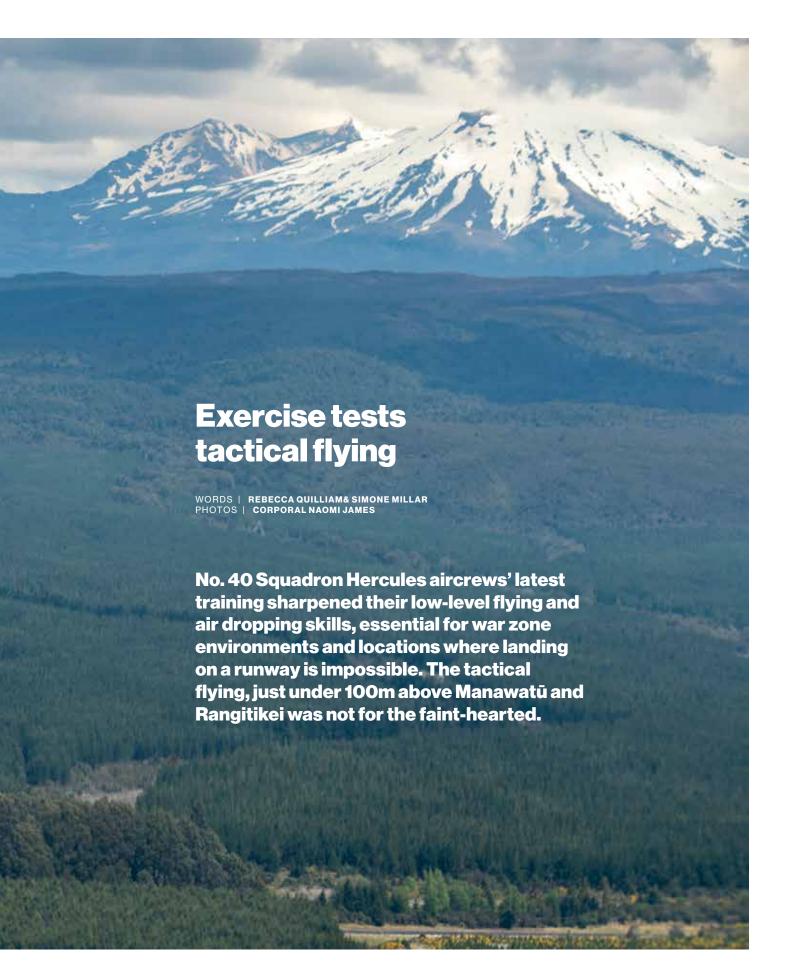
"In my experience, No. 3 Squadron operators are great partners because the pilots and crew pursue excellence in their roles as much as we do in ours.

"They are experts in their role who pride themselves on having a good understanding of the tactical plan, and often contribute to it well. They are professional, adaptable and get the details right which are exactly the attributes required to enable mission success no matter the task," the SOF member said.

"Working so closely with No. 3 Squadron over the years has built trust between our teams. We know that our partners will get us where we need to be, according to the plan we agreed upon. I can also trust that if the situation changes, our Pilots and crew will make the right decisions with the mission and our team's safety in mind.

"The more we train together, the better we can respond to more complex problems with less notice."









TOP LEFT

C-130 pilots doing tactical flying

BOTTOM LEFT

C-130 Hercules from the Republic of Singapore Air Force

TOP RIGHT

Cargo dropped to a specific location at Raumai Range

BOTTOM RIGHT

NZ Army's 5th Movements Company collecting the dropped cargo

lying from Base Ohakea, the navigational training exercise involved two Hercules C-130 aircraft and personnel from both 40 Squadron and the Republic of Singapore Air Force (RSAF) 122 Squadron.

Having the RSAF participate in the annual training activity allowed the Air Force to build relationships and interoperability with international partners.

"We have a long-standing and strong relationship with the Singapore Air Force," said Air Component Commander, Air Commodore Shaun Sexton.

"It's important that we continue to train with our key partners so we're ready and able to operate alongside each other when we might be called upon. The air mobility and airdrop skills practiced during the exercise were crucial when responding to a range of challenging situations that could eventuate in the Asia-Pacific region," he said.

Hercules Captain Flight Lieutenant (FLTLT) Michal-Louise Paget said a lot of the low-level flying is performed during humanitarian aid or disaster relief missions. "If an earthquake has hit one of the Pacific countries or a tsunami comes through and the runway itself, if they have one, is unusable, we need to be able to conduct our air drop operations to deliver the aid they require.

"This means we have to fly in low in order to get a load out the back that has to hit a specific drop zone, which could be a paddock or area next to a runway."

During the exercise the squadron worked alongside the New Zealand Army's 5th Movements Company, which constructed and prepared the loads, and 10th Transport Company, which recovered the loads once they had been delivered to the drop zones.

The Hercules is also an ideal vehicle to use for tactical flying into war zones.

"You're not going to send a civilian airliner into somewhere they can't land and because we are constantly maintaining these currencies we always have a crew ready to go. We are able to drop equipment or aid out of the back of a plane that none of our other aircraft can do."



FLTLT Paget was one of the pilots who flew into Afghanistan last year after a military offensive by the Taliban led to the fall of the Islamic Republic of Afghanistan.

The New Zealand Government called on the Air Force to conduct a non-combative evacuation operation alongside many other nations – many of which longstanding relationships had already been developed.

"We were able to get into Kabul safely and we were able to pull out refugees that we were able to bring back to New Zealand, so it was quite rewarding," FLTLT Paget said.

Detachment Commander Squadron Leader Kendall Dooley said in order for the Defence Force to maintain its readiness to deploy, it needed to undertake training in land, air and sea environments.

"Being able to exercise in various environments ensures our personnel are highly trained and able to support domestic, regional and global security situations."





Aviator of the Year

B | EDITOR Y | REBECCA QUILLIAM

The Royal New Zealand Air Force's Aviator of the Year for 2022 is Acting Sergeant Rebekah Richardson, who has been recognised for her outstanding performance of her duties and applying Defence Force core values, benefitting deployed personnel and the success of Defence Force missions.

he logistics specialist is based at the Deployed Personnel Service Centre (DPSC), at Headquarters Joint Forces New Zealand (HQJFNZ), providing personal and administrative support to deploying individuals across a wide range of missions.

During the nomination and selection process, Acting Sergeant (A/SGT)
Richardson's rank was Corporal (CPL), but she has since been promoted.

Her citation pointed out that A/SGT
Richardson worked above and
beyond in helping with the success
of numerous international
Defence Force missions across

Defence Force missions across Asia, the Middle East and Antarctica.

It read, in part: "CPL
Richardson epitomises
the NZDF values in her
approach to and delivery
of the administrative
tasks that she
manages for multiple
deployed missions."

"CPL Richardson has displayed courage to be able to speak up and provide timely advice and has become a trusted and relied on member of the HQ. It would normally take six months to get up to speed in this role however, CPL Richardson achieved this in six weeks," the citation said.

Outside of work, A/SGT Richardson has been heavily involved in the RNZAF Wellington Junior Ranks committee arranging an array of events, most notably co-organising the showing of "Top Gun: Maverick" at a local cinema to raise funds for the Missing Wingman Trust, raising \$650.

"What is most impressive in CPL Richardson's approach is the value she places on integrity and the manner in which this is done. She will not shy away from raising important issues to provide the ground truth in a non-confrontational manner," the citation said.

A/SGT Richardson said receiving the honour was "a lot to take in".

"I pride myself in going the extra mile for our customers so to speak. I get a thrill of knowing I have helped pers to the best of my ability; I was given the nickname of 'CPL Go To' by a team who I work with very closely."

After growing up in Wainuiomata Lower Hutt, A/SGT Richardson joined the Air Force at age 21, following in her father's footsteps. The challenge along with family pride drew her in where she chose Logistics as her trade.

"Logistics appealed to me the most because it is so diverse and there are a lot of opportunities – it's not one job for your whole career."

Nine years later A/SGT Richardson has performed a number of roles, including being responsible for supporting United Kingdom-based Air and Land elements to be delivered to Ukraine from the United Kingdom in the immediate aftermath of the invasion by Russia earlier this year.

However, the highlight of her career to date was being deployed on a humanitarian aid and disaster relief to Papua New Guinea in 2018 and seeing the tangible difference her job made to the local population.

"We were deployed for a couple of weeks delivering aid to remote locations. The areas were remote, which came with some challenges that we had to overcome, for example load and unloading the aircraft by hand. It was great seeing the impact we were having delivering the aid to them. Seeing the thankful looks on the locals' faces is something I'll never forget."

Another memorable moment was being included on a flight to Antarctica and spending the day on the continent.

"Not many people get to say they've been down there and getting to have the opportunity was pretty amazing."

Being included on an operational deployment in the future is a goal for A/SGT Richardson.

"At HQJFNZ I have learnt a great deal about the work we do abroad and the numerous organisations we deal with. I would like to take my new skills away with me in an operational environment."

If she was to give advice to the next generation of aviators, A/SGT Richardson recommended they take every opportunity offered to them.

"Even some of the tasks that might not seem exciting, they are the ones that leads to the better opportunities. Take the bull by the horns and give everything a go and you will find your niche. I feel like I've done that and reaped the benefits."



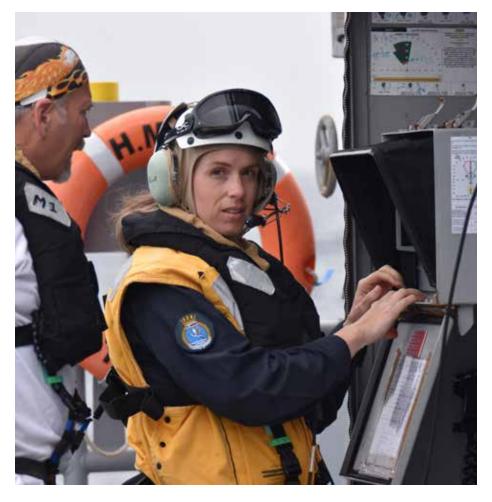
What are First of Class Flight Trials? Our friends at Navy Today catch up with HMNZS Te Mana as it regenerates the Royal New Zealand Navy's Combat Force aviation capability off the East Australian coast.

t's the sort of damp, drizzling morning when it feels like your ship is in a small pocket of visibility, pitching in rough grey seas that blend into even greyer skies. But for Anzac frigate HMNZS Te Mana, it's ideal flying weather. The flight deck guard rails are down and members of No. 6 Squadron's 'C' Flight huddle in an alcove, waiting for the ship's helicopter to work out an approach.

There's been a four-year gap since helicopter operations involving Te Mana, due to the ship's extensive Frigate Systems Upgrade in Esquimalt, Canada. And it is precisely because that upgrade – and the considerable changes to the ship's superstructure – that the ship, its crew and 'C' Flight are performing what is usually a once-in-ship's-lifetime task.

Generally once, for each class of ship, First of Class Flight Trials (FOCFT) are conducted. The trials, carried out over three weeks, ascertain the wind, movement and weight parameters for launching and recovering a specific helicopter from a ship, day and night. With Te Mana, that involves the Navy's maritime attack helicopter, the Seasprite SH-2G(I), while larger ships, such as HMNZ Ships Aotearoa, Canterbury and Manawanui, would need to conduct trials for both the Seasprite and No. 3 Squadron's NH90. Essentially, a FOCFT is done for every helicopter type and every ship combination.

This is different to a SARC, a Sea Acceptance Readiness Check (Aviation), a regular part of building up an aviationcapable ship and its company to be 'Safe to Operate and Operated Safely'. Te Mana, departing Auckland recently, remained in the Hauraki Gulf for a week conducting its SARC, including launching and recovering, winching, vertical replenishment (transport of underslung loads) and Crash On Deck exercises. It meant the ship's company and the Air Force/Navy flight crew became integrated, and with the Maritime Operations Evaluation Team passing the ship's SARC, she was given the green light to proceed across the Tasman.







Te Mana, commissioned over 20 years ago, has had a FOCFT done before. But the extensive works done to the upper decks have altered the dynamic airflow over the ship, and so new data had to be gathered.

The more variable and challenging the weather, the more complete the data gathered will be, and tranquil sub-tropical waters aren't going to cut it. So, after calling in at Sydney, Te Mana headed south for some 'ideal' weather.

Lieutenant Richard Horne, Te Mana bridge watchkeeper, says as well as gathering the data, the three weeks of flying continues testing the ship's organisation and ability to safely conduct flying operations in all variations of weather and sea states. "Hence the need to go far south and chase some bad weather!

'Relative wind' is a huge factor. "Yes, we do turn into the wind for helicopter operations, but essentially we choose a course and speed to manipulate the 'relative wind'.

That's how the 'true' wind actually feels over the ship and flight deck. The FOCFT defines the relative wind within a set of parameters that we know is safe, and usually that chosen course is close to pointing into the wind, but not always."

He points to a diagram of relative wind parameters. "How heavy the aircraft is determines how restrictive those parameters are. You'll notice that when the aircraft is 'Night Heavy' (heavy and flying at night) we use the purple parameters, which is very restrictive because it's more difficult for the aircraft to launch in those conditions."

Since sister ship HMNZS Te Kaha has had the same Frigate Systems Upgrade, and is effectively identical, Te Mana's hard work in the Tasman will be used to create Ship Helicopter Operating Limits for both Anzac frigates.

"Our goal is to essentially enable the aircraft to be safely operated in various combinations of wind speed and direction, aircraft weight, and deck movement."

- Lieutenant Richard Horne

LEFT

Winching onto the deck of Te Mana

MIDDLE

CPOMAA Nicole Mattsen, HMNZS Te Mana's Flight Deck Officer

TOP RIGHT

Lowering an item onto the ship's deck

BOTTOM RIGHT

Preparing the ship for helicopter operations



Recovery from the ice

Suffering a major maintenance problem on the icy runways of Antarctica is not ideal. But when a propeller fault on a C-130 Hercules was recently discovered, a dedicated team of maintainers flew to the frozen continent to fix it in sub-zero temperatures.

he job involved new kit bought this year to shelter the maintainers during the difficult job and coordination with the 109th New York Air National Guard maintenance team, which provided valuable experience to pass on.

The fault was discovered when the aircraft attempted to depart from the Phoenix Airfield in Antarctica late in October. The breakdown prompted the rapid deployment of a nine-person Air Force maintenance team to Antarctica to repair and recover the aircraft.

Task planning and preparation for leaving began that evening and the following day teams were identified and the required parts and tools pulled together.



LEFT

Working beginning on the faulty propeller on the

MIDDLE

Maintainers working on the fault inside the ice shelter

BELOW

Ice shelter covering the C-130's faulty propeller Photos: FLTLT Dan Lamb



Two days after the fault was discovered, a team of nine maintenance personnel finalised the pack-up and flew, with a spare propeller to Christchurch followed the next day with a flight to Antarctica on a United States Air Force C-17 aircraft, design engineer Flight Lieutenant (FLTLT) Dan Lamb said.

Over the next four days the faulty propeller was removed, a replacement installed and all rigging checks completed through conditions averaging from an ambient –17C to –29C, with the wind chill factor, on the apron of Phoenix Airfield.

On hand to help complete the task was the 109th New York Air National Guard maintenance team based at Antarctica's Williams Airfield. "They provided a range of equipment, contacts and valuable first-hand experience with Antarctic aircraft maintenance and engine ground running operations," FLTLT Lamb said.

Also helping with the task was an ice shelter, purchased this year, which was erected using a new generator borrowed from Scott Base.

"This ice shelter provided essential protection from the brutally cold conditions, allowing propeller installation and rigging to progress far quicker than what would have otherwise been possible."

Four days after work began on the propeller, aircrew arrived and engine ground runs started the next day. Over the following four days more runs and maintenance were undertaken before the aircraft was able to fly back to Aotearoa New Zealand.

"The mission was very successful. The planning identified all elements required to complete the whole task safely. A huge number of assets came together to achieve the goal, as well as a large network of contacts from a range of agencies.

"With maintenance and aircrew teams working together the mission was achieved safely and efficiently," FLTLT Lamb said.







Decades of flying to the ice

B | EDITOR Y | REBECCA QUILLIAM

For nearly 70 years the Air Force has been an important presence in the frozen continent of Antarctica. Since 1956 six Air Force aircraft types have been used in Antarctica to fly scientists, Defence Force personnel and equipment to the southern-most point of the earth. They have also helped with mapping the continent and for surveillance in the Southern Ocean.

he Defence Force has a long-standing commitment to supporting scientific and environmental programmes in Antarctica and its personnel play an integral part of operations there. We provide Hercules and Boeing flights as well as support air movements operations at Harewood Terminal in Christchurch and at Phoenix airfield in Antarctica. NZDF personnel can fill a range of roles in support of Antarctica programmes including cargo handling, communications, and light engineering teams.

Sixty-six years ago the RNZAF
Antarctic Flight was formed to help
the Commonwealth Trans-Antarctic
Expedition. Squadron Leader JR Claydon
led the three-strong flight, which was
equipped with a de Havilland Beaver
and an Auster floatplane, according to
NZ History.

"It helped transport men, dog teams and supplies, and carried out geological mapping over two summers (1956–1958) before it was disbanded in 1960."

Five years later Air Force operations to Antarctica resumed with the arrival of a Hercules, which flew the first of what have become annual summer flights from Christchurch to the continent.

The same fleet of five Hercules that began their flights to the ice in 1965 are still flying their today, with the latest summer season already seeing a number of trips to the ice runway near Aotearoa New Zealand's Scott Base.

Lieutenant Commander (Rtd) Ross
Hickey was one of those who had been
deployed to the Defence Force's largest
summertime deployment, Operation
Antarctica. Before his retirement from the
Navy he was the Defence Force's Senior
National Officer at Scott Base and he
told Air Force News about the depth of
work the Air Force had contributed to
the operation.

Alongside the fixed wing aircraft, the Air Force's Iroquois helicopters also operated in Antarctica, from 1985 until 2000, supporting science events. No. 3 Squadron pilots were brought down for valuable flying training in extreme conditions, he said.

"So back then they were painted orange. They would bring down pilots – it was valuable training for them. But East Timor was cranking up at the time and there was a high demand from the NZDF to have that Iroquois fleet on other high demand operations, so we finished in 2000 and ever since then, we've utilised civilian helicopter companies out of New Zealand."

The P-3K2 Orion has also operated in Antarctica for a number of years, carrying out surveillance over the Southern Ocean, working collectively with the Royal New Zealand Navy and Ministry of Foreign Affairs and Trade, he said.

"If they are required they can land on the US runway, refuel and remain overnight for respite for the pilot and crew and then carry on the next day. The advantage of that for New Zealand, is that by bringing them all the way south from New Zealand and refuelling, it gives them so much more surveillance time, deep in the Southern Ocean, as opposed to flying out of Invercargill."

The Boeing B757 has been operating in Antarctica since 2011, Mr Hickey said.

"It's a great asset to bring south – particularly when you can get 120-odd seats on it for moving people. Primarily they support the US and Antarctica New Zealand, but we've also flown flights into Terra Nova Bay in support of the Italians."

Op Antarctica is the New Zealand Defence Force's largest mission over the summer season, with around 200 people deployed on the operation.

Christchurch's Harewood terminal provides all the cargo support and personnel processing, for the US programme, the Antarctic New Zealand programme and also for the Italian programme.

At Scott Base, Defence Force personnel fill roles including communications operations, a chef, cargo personnel, logistics, plant operators and a Senior National Officer looking after the Defence Force effort at the base.

Mr Hickey emphasised the importance of NZDF staff working in Antarctica, not just to the science community, but also to the wider public.

"We're not just coming down here in big grey ships and aircraft, but we're down here in support of peace and science."



Fight night experience creates lifelong passion for sport

B | SENIOR COMMUNICATIONS ADVISOR
Y | KIRSTY LAWRENCE

When Air Force photographer Corporal Naomi James first signed up to take part in a boxing event at Base Ohakea, slightly on a whim, she just thought it would be a great event to take part in.

ow, more than a year later, after countless sparring sessions and dedicated trainings, she says she has learnt to believe in herself and be more confident through boxing.

Corporal (CPL) James took part in Hawkins Ohakea Fight Night recently, which was the first time she has ever been involved in a boxing event.

The event, which was held to raise money for mental health charity I AM HOPE, saw competitors competing predominantly from Ohakea, but also included representation from Bases Woodbourne and Auckland and support from a local Boxing Club.

CPL James had a long road to this fight night, originally signing up to fight in 2021 after she was assigned to photograph the event in 2020.

However, despite dedicating time and effort into training, the event couldn't go ahead due to Covid-19.

But that didn't stop her looking forward to competing in 2022.

When it came to registering for 2022, she had no hesitations about trying to finally get into the ring.

In 2021 she had already been involved in baseline fitness testing, which saw competitors undertake the beep test, then after four weeks of training be re-tested to see how much they improved.

They then moved on to further fitness testing, sparring sessions and practices until the event was cancelled.

Having put a lot of work in during 2021 she knew what she had to do this time around, and got stuck into her training, which had to fit in around her busy job as a photographer.

On the day of the fight, CPL James said it wasn't until the weigh in that the nerves really started to kick in, but she was given continuous reassurance from her coach, which helped her to remain calm.

"I didn't let myself get too overwhelmed. I was excited, nervously excited, to go out and show what I knew I could do and do it for myself."

As soon as she walked through the doors to the ring, she said she felt calm and confident.

"In the ring, the scariest part was when you squared up against each other.

"You can hear people in the audience calling, but when you actually start fighting you can't hear what people are saying, just reactions to punches and the coaches from both sides.

"During the fight I was in my zone, loving every minute of it, it was awesome, such a great experience."

Even though CPL James didn't win on the night through a close split decision call, she said the experience was still incredible and just the beginning of her boxing journey.

Her love of boxing now runs so deep that after the fight she went and completed Shane Cameron's Counterpunch Level 1 course, which will be of value to the Ohakea Boxing Club as she will be able to be part of the coaching team and assist with running boxing fitness classes as a trainer.

For anyone thinking about pushing themselves outside their comfort zone through doing something like this, she wholeheartedly encouraged it.

"It's not as scary as people think it is.

"I didn't know the potential that I had until I applied myself. That's not just for boxing, but anything in life. Through dedication, blood, sweat and tears and the right equipment, you never know where you might go with things."

Looking ahead, CPL James said she wanted to be involved in more corporate fights and would be looking for opportunities to do so.

The amount of money raised for I AM HOPE was not known when this article went to print. A \$500 donation was also made to the Missing Wingman Trust and local charity, Healthy Bastards.

"If you have been thinking about doing something out of your comfort zone and commit yourself to training and working on it through the good and bad, you can achieve so much."



Match fitness for medics

B | SENIOR COMMUNICATIONS ADVISOR Y | SIMONE MILLAR

Leading Aircraftman
Scott Endres was one
of two Air Force medics
fighting it out for the title
of 'top medic' recently
and he took out third
place, after a gruelling
three day competition.

ifteen medics from the Army, Navy and Air Force pushed their skills to the limit, in the biennial event.

"Medic Match has been one of the most exciting and rewarding experiences for me. I can hand on heart say the competition has increased my passion for aviation medicine and my esprit de corps," says Leading Aircraftman (LAC) Endres.

Traditionally held in the Manawatū, this year's competition was based in Auckland, at Tamaki Leadership Centre, Devonport Naval Base and Base Auckland

The tri-service competition is designed to find the best all round medic and includes physical endurance activity, shooting, advanced medical skills, cognitive problem-solving and public speaking.



The 25-year-old joined the Air Force straight from school and always knew medicine was for him.

"Growing up through school and being part of the cadet forces, I thought I'd give the real deal a try and with the medic trade you get great skills and opportunities. There are so many intelligent and experienced people that can teach you how to grow as a medic," says LAC Endres.

On day one of the competition, the medics are tested for resilience at the shooting range at Auckland's Tamaki Leadership Centre, followed by a 'Rescue Randy' scenario; dragging an 80kg casualty over 75 meters and applying a tourniquet and pressure bandage.

Core skills are focussed on in day two, with competitors completing a swim rescue and resuscitation at Devonport Naval Base.







Four medics made it through to the third and final day, with clinical and technical excellence the ultimate test, contested at Base Auckland.

"The competition is designed to find the best all-round medic, there's something to challenge everyone from any service, whether it's a physical endurance activity, shooting, advanced medical skills, cognitive problems, public speaking or just turning up with the right kit.

Competitors need resilience, trade skills, and technical excellence to win," says Medic Match 22 co-ordinator, Lieutenant (LT) Aidan Bilbe, Assistant Training Officer Deployable Health Organisation.

LAC Endres says the breadth of activties captured the various aspects of a medics' skills and abilities.

"While we were tested on trauma, it was great to also be assessed on primary health care. It really meant the multifacets of our job were acknowledged," he says.

First place went to Army medic Staff Sergeant Andrew Kennedy. Army medic LCPL William Wallace took out second place and Air Force medic LAC Scott Endres came in at third place.

"The participants were very impressive this year and the top spots were hotly contested. It's the first time the biennial challenge has been spread across more than one day, and the challenges were carefully designed so that they don't favour one service or another," says LT Bilbe.

Coming in at the top of the Air Force ladder, and at third overall, LAC Endres says it's been an opportunity to showcase his skills.

"I turned up, I did my best. It really is validation that I can be proud of my knowledge and skills in my job," he says. "I can hand on heart say the competition has increased my passion for aviation medicine and my esprit de corps."

- Leading Aircraftman Endres

International space relationships

B | SPACE OPERATIONS INSTRUCTOR, NZDF SPACE PROGRAM Y | FLIGHT SERGEANT DAVID CRESSWELL

Three personnel from the NZDF Space Program recently travelled to Colorado Springs to conduct training and obtain on-the-job experience with the US Joint Task Force Space Defence Commercial Operations (JCO) cell.

his consisted of two weeks of lectures and exercises, followed by immersion in the JCO America operations facility.

The JCO is a collaboration of military, commercial, and coalition nations - all of which have a vested interest in understanding what is happening in space. The use of commercial and unclassified data sources allows for a level of information sharing and speed of collaboration between organisations that ensures responsiveness in dynamic situations in space.

JCO use commercial providers with existing space sensor networks to provide unclassified Space Domain Awareness - including the tracking of launches, monitoring Direct Ascent Anti-Satellite (DA-ASAT) testing, tracking satellite manoeuvres and space Rendezvous and Proximity Operations, and monitoring satellite breakups and separations.

The JCO uses a number of commercial providers which operate telescopes and sensors around the world, to monitor satellites or events of interest. The data is fed into a library and analysed by computer programs and personnel.

Products the JCO produce allow countries and users of space to be aware of threats posed to them, ensuring they have as much time to respond to an event as possible. One of these products is a Notice to Space Operators (NOTSO) that provides details of an event and the potential impacted area or satellites – similar to a NOTAM, which is produced for aviators.

In November 2021 a Russian direct ascent ASAT test was conducted. The JCO was tracking the event and was able to produce and propagate imagery and products within a very short time frame, enabling a swift response and helping others mitigate against some of the effects from the break-up of the target satellite. The test produced thousands of pieces of space debris that put many satellites at risk including the International Space Station.



While the NZDF team was in Colorado Springs, they were able to track various events, such as satellites manoeuvring and rocket launches. They facilitated the production of NOTSOs in the roles of Site Lead and Deputy Site Lead.

The skillsets that the team learnt were put to the test during a JCO exercise, also called a 'Sprint Advance concept training' SACT. The JCO exercised its ability to respond to simulated events, along with commercial providers testing their programmes and equipment. These simulated events could include threats from ground assets or space assets. The NZDF team exercised with many coalition countries and commercial companies all over the world that operated in their respective time zones therefore conducting 24/7 operations and C2 cycle.

During their time in Colorado Springs the NZDF team worked with personnel from the Royal Air Force and US Space Force. This collaboration built tactical level relationships and provided additional opportunities for the NZDF Space Program.

Building relationships and continued collaboration with coalition partners ensures we do not 'go it alone' and are able to develop space capabilities that support the New Zealand Government and our coalition partners.

Building and maintaining these relationships also allow the Defence Force to increase our understanding of the space domain and how to be custodians for those who benefit from assured access and preserve it for future generations. New Zealand's presence is rapidly growing in space, and we are a leading nation in many facets of Space Domain development. This comes with the responsibility to ensure that New Zealand interests in space are maintained and protected in accordance with international treaties and obligations.

Space Domain Awareness (SDA) is a critical foundation of space security, incorporating the identification, characterisation, and understanding of objects in orbit such as commercial and military satellites along with their uses.

SDA allows for the prediction of orbital characteristics of objects, assisting in determining normal pattern of life or abnormal behaviours.

It can also assist with the prediction of conjunctions providing forewarning of objects that may be at risk of close proximity. The unclassified nature of the data and reporting the JCO use and disseminate means that in instances like DA-ASAT testing, information can quickly pass from the JCO to governments, institutions, commercial groups, and any other party with an interest in the space domain. This enables a swift global response and the calling out of irresponsible behaviours that may impact our access to services reliant on space capability.



Finding recovery in art

B | SENIOR PUBLIC AFFAIRS ADVISOR Y | ALEX MASON

It's hoped the recent Defence Force's Art in Recovery Workshop will be the first of many. un with the support of the New Zealand Army, the free, two-day event in Christchurch was open to serving and former injured, wounded or ill personnel from all three services, and NZ Army Families of the Fallen.

Former aircraft technician Gill McFarlane signed up for the workshop after dealing with symptoms of long-Covid.

"Having Covid-19 and still working and being a mum, there's always pressure, there's always stress, and I thought this would be a good way of coming up with some tools for dealing with stress."

Ms McFarlane deployed to Iraq, Afghanistan and Antarctica while serving with the Royal Air Force and Royal New Zealand Air Force, and is now a health and safety advisor at Base Woodbourne.

The workshops were "fun, joyful and down-to-earth" and drawing with pastels was calming and meditative, and she was surprised by how much she enjoyed the poetry exercise, she said.

Those "aha moments" when people discover new activities, are a particular highlight for Elizabeth Love – one of two qualified art therapists who led the workshop.

Love, who previously served in the Royal New Zealand Dental Corps, said the creative arts are important in helping to ease stress.

She said participants were able to dabble in a range of mediums.

"[We] wanted people to go away with the ability, when times are hard, to have places to go in their imagination. They don't have to wait until after work to reach inside themselves."

Ms McFarlane is grateful for Veterans' Affairs and the Returned and Services Association, who sponsored the workshop. She hopes to see similar events at all NZDF camps and bases.

It's a sentiment echoed by workshop organiser Rebecca Maddaford, Liaison Officer – Injured, Wounded, III.

"In these busy and stressful times, something we should all consider is how we look after ourselves. I would like to see more of these kinds of creative art initiatives available, to support our NZDF whānau to enhance their mental health and wellbeing."

ABOVE

Gill McFarlane with some of her work



The end of the year can be a fun and busy time. We hope you all take time to recharge, enjoy yourself and celebrate achievements.

It's also a busy time when pressures, risks and stressors, can begin to build up at work and at home.

Our key message to you:

Spend some time doing things that you enjoy, whether that's getting outside in the sun, going for a swim, spending time with loved ones, reading a book or even have a bit of time doing nothing!

Over the Christmas period it's important to think about your own self-care. It's also a time to keep an eye-out for friends and loved ones for whom Christmas may be a lonely or difficult time.

Like you, we want people to enjoy this time of year, have a good break and be back in good shape to start 2023, energised and happy.

Defence Health have created a helpful resource with useful information on keeping ourselves and others safe and well.

It covers:

- Support services for you and your whānau
- Financial Health links to tools and resources
- Healthy relationships and consent guidance and contacts for support and advice
- Tips and tools to keep yourself and others safe regarding alcohol and other substances.

Defence Health Hub – for tools and information to help us all thrive and perform at our best.

Scan the QR code to get this helpful guide. Share it with your team as we head towards the end of the year and upcoming break.

Remember – rest, relax, be proud of your achievements and enjoy a well-deserved break!



Scan the QR code to get this helpful guide. Share it with your team as we head towards the end of the year and upcoming break. Remember – rest, relax, be proud of your achievements and enjoy a well-deserved break!



Contemporary collecting with 'Operation Protect'





New Zealanders have been involved in military aviation for more than a century, and it is the Museum's mission to preserve and share their stories, from the earliest days right through to the present.

ne of our more recent acquisitions is a collection of material relating to something that is very recent indeed – 'Operation Protect', the Defence Force's support to the Managed Isolation and Quarantine (MIQ) facilities around Aotearoa New Zealand during the Covid-19 pandemic.

Included in the collection is an Operation Protect patch, two examples of the Defence Force standard issue face mask, maps indicating MIQ facilities around New Zealand, policy documents, instructions for personnel, and a rather humorous guide to facial hair that doesn't impede mask effectiveness. It demonstrates the wide array of material we're interested in, which isn't just aircraft and war stories!

In the museum world, the acquisition of material relating to current events is called contemporary collecting. This concept may not be the first thing that comes to mind when people think of a museum, which is often full of 'old stuff'.

There are, however, certain benefits to engaging in contemporary collecting. Usually there is a lag in collecting, with people offering items to the Museum many years after their service (or that of a relative), when they start to think about downsizing or clearing out space at home. The trouble is, by the time they come to us, the condition of the items may have deteriorated, other things may have been lost, or important details forgotten. There is also a certain degree of randomness to this approach.

For something to end up at a museum, it first has to survive. Multiple factors influence the chances of something surviving and the more time that passes, the smaller that chance becomes. Contemporary collecting allows us to create a more complete, inclusive and interesting collection by acquiring material in a more targeted, proactive way, thereby removing some of the randomness.

As mentioned above, one of the main purposes of our collection is to tell stories. Collecting items from contemporary events allows us to preserve these stories and the physical integrity of the items that tell them. We are always on the lookout for opportunities to collect contemporary material, as it offers a chance to preserve a much richer story of the Air Force as it is today, which of course will become tomorrow's history.

DONATIONS

Do you have an object or collection that tells a story about our Air Force? Contact the Museum Registrar, Jason Sim, to discuss donating to the Museum collection: research@airforcemuseum.co.nz



REPORT CRIME AND INCIDENTS ONLINE CONTACT FORM

Military Police have launched a new online contact form, available on the intranet and internet. This can be used by anyone to report criminal incidents to the Military Police and reports can be anonymous.

Incidents involving the NZDF can be reported, including crime affecting service people or service resources (buildings, vehicles, equipment, money), as well as allegations of crime committed by service personnel.

Scan the QR code or go to nzdf.mil.nz/nzdfmp to be directed to the form. Alternatively you can email MPCrime@nzdf.mil.nz





Junior officers lead the way

B | OC COMMAND & RECRUIT TRAINING SQUADRON Y | SQUADRON LEADER MARK DRURY



The Junior Officer
Inter-Service Sports
Tournament (JOIST) has
been a long standing
tournament that brings
junior officers under
training from all three
services together to
understand each other's
services and to form
bonds that will provide
benefits to all throughout
their career.

he commanders of all three service training schools provided the direction and intent for JOIST 2022 held recently at Devonport Naval Base, HMNZS Philomel. Traditionally JOIST is an inter-collegiate sports tournament but due to all three officer training courses being at different stages, it was elected to add combined leadership 'Lead Teams' training and single service demonstrations in to the week.

In addition to leadership training, the sports component to compete for the JOIST Trophy was run by the Navy and Army physical training instructor (PTI) trades with a touch rugby, Ki o Rahi, and orienteering competition.

Touch rugby was convincingly won by the Army team with the Ki o Rahi being won by Navy. After a highly contested orienteering race there was just one minute between first and second place. The Air Force finishing in one hour and one minute and the Army in 60 minutes, raising the much coveted JOIST Trophy. Well done Army!



Another fiercely fought event was the Weka Trophy awarded to the overall winner of an endurance race. The event consisted of many burpees, plus more burpees, equipment carrying race and mud flats that provided a perfect setting for the PTIs to ensure the term 'endurance' was experienced.

After a gruelling run the exhausted teams exited the flats unrecognisable and rather pungent. Everyone kept their distance while the teams got ready for the final 2km equipment carry and sprint finish.

With a convincing win, the Army conducted the course 24 minutes ahead of its nearest rival Air Force, meaning the Army could raise the Weka Trophy as well, well done Army!

Notwithstanding the physical success of the Army, the other two teams were exceptional considering the stage of training and all should be rightly proud of their efforts and how they represented themselves, the school and their service.

Following the main competition, all three services demonstrated their trades and expertise to the other services.







the damage control and fire training simulators where each person got to experience the control of damage by putting out a fire and shore-up hull breaches.

The teams then went west to see an Army display of Heli borne insertions and clearances in the urban area simulator, before all experiencing an NH90 helicopter demonstrating its capability alongside its Army colleagues.

At a formal dinner celebrating the end of the week Commanding Officer (CO) Leadership Development Group, Commander Kerry Tutty, opened the event and paid homage to the late queen and acknowledged our allegiance to our king, His Majesty King Charles III.

Awards for the winning teams were presented by Chief of Navy, Rear Admiral David Proctor. The pride and joy of the Army successfully taking both trophies was celebrated with the other services magnanimously congratulating them in their success.

Other individual awards of acknowledgement were also presented.

I wrapped up the evening by acknowledging and thanking personnel for all of the work involved to achieving such a successful JOIST.

I congratulated all officer cadets and stressed the importance of representing each service as a master of their domain and to ensure that a collegiate and joint approach is needed to achieve Joint Operational Excellence.

As new friends dispersed and returned to their units, the memories, lessons, importance, and experience was worth all of the hard work with staff reconnecting to each other's service and the ability to lean on each other in the future helps us regenerate as a force and we look forward to doing it all again next year where the Commandant of Army Command School has offered Waiouru as the host venue. I look forward to seeing what the PTIs will devise for that endurance run!

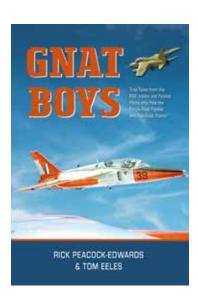


Kotahi te kowhao o te ngira kuhuna ai te miro whero, miro pango, miro ma

There is but one eye of the needle through which is entwined the red thread, the black thread and the white thread together (Strength in unity)

Air Force News Book Giveaway

Be in for two chances to win these two books dedicated to military aviation stories.

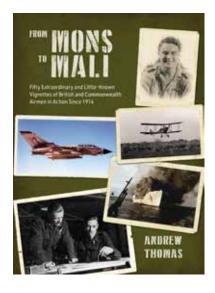


GNAT BOYS:

True tales from RAF, Indian and Finnish pilots who flew the single-seat fighter and two-seat trainer.

The Folland Gnat was used by the RAF mainly in the advanced training role, in the 1960s and 70s, where it proved to be an ideal lead-in trainer for high-performance aircraft such as the iconic Lightning, the first RAF supersonic fighter. It was also the aircraft used by the famous Yellowjacks formation aerobatic team, formed in 1964, the forerunner of the world-famous Red Arrows team which was equipped with the Gnat for over a decade before being replaced by the Hawk in 1980. Lesser known, the Gnat was also used as a lightweight fighter by both the Indian and Finnish Air Forces. In the case of India, the Gnat, later called the 'Ajeet' (Midge), saw combat experience in the Indo-Pakistani wars. most notably in the Battle of Boyra. Today, over 60 years since the aircraft first flew, several Gnats continue to be operated from North Weald Airfield in Essex by the Heritage Aircraft Trust under the brand, the Gnat Display Team.

This book relates the history of the aircraft and includes many fascinating and untold stories by those who flew the aircraft, many of them well-known and distinguished aviators including those from the Indian and Finnish Air Forces. There is also a focus on the civilian life of the Gnat in the 21st century with accounts from those who continue to fly the aircraft with the Heritage Aircraft Trust



FROM MONS TO MALI:

Fifty extraordinary and little-known vignettes of British and Commonwealth airmen in action since 1914.

Acclaimed author Andrew Thomas has chosen fifty fascinating cameos of individual actions or incidents across a wide variety of major and minor campaigns and scenarios ranging from the First World War to the present day.

Each selection is accompanied by relevant, often rare, photographs.

So, from the Battle of Mons in 1914 through shooting down a Zeppelin over Teeside, to WW2 Timor Ace 'Butch' Gordon in his Beaufighter in 1943 and a nightmare for Halifaxes over Nuremburg in 1944, to SAAF fighters over Angola in September 1985 and army support tasks in Mali in 2021, with many more in between, the author's hand-picked personal choices make for gripping reading. A must for all those interested in the war in the air throughout history.

IN TO WIN!

Email airforcenews@nzdf.mil.nz by January 9, 2023 to go into the draw for two chances to win copies of Gnat Boys and From Mons to Mali. Include your name and postal address and type: Air Force News Giveaway in the title line.

Notices

FAREWELL NZ7003

Sadly it's finally happening...... we are seeing the beginning of the staggered retirement of the C130H(NZ).

NZ 7003 will be the first to retire and put her feet up, after 57ish years of service, since the RNZAF took ownership on the 5 April 1965.

To acknowledge this significant event, there will be a Cocktail Party held at RNZAF Base Auckland, to see her off early February, 2023.

No. 40 Squadron are in the initial scoping and planning phase and welcome those that are interested in attending register, by emailing 40sqn4winds@nzdf.mil.nz

More details will be passed as they come to hand.

ATTENTION AIRMAN CADETS - 1973

Those who enlisted as Airman Cadets at Woodbourne in January and March of 1973 are notified that a gathering will take place at the Cosmopolitan Club, Taupo, on Saturday 14th January 2023 to commemorate their 50th anniversary.

Partners welcome. For further details please email the organisers as follows: Tony Johnstone q85988@gmail.com and Gordon MacRae gordonmacrae77@gmail.com



VOLUNTARY EDUCATION STUDY ASSISTANCE

Semester One, 2023 applications are being accepted. You may submit your request for funding within 90 days of your study start date. Apply online at NZDC, Defence Learning Toolkit VESA Application (e-form)

Applicants should be aware of their responsibilities prior to making an application IAW DFO 3/2016.

Prior to starting the application process, applicants are to:

- Confirm the level of study is right for them with NZDC DLearn
- Advise their 1-up of their study intentions
- Provide supporting paperwork including study documentation from the official learning provider website (ready to attach to your e-form application)

Contact your local DLearn Adult Learning Tutor who can assist you with your application. If you have any further queries, please email our Tertiary Services & Support Advisor at nzdcdlearnvesa@nzdf.mil.nz

POLICY (terms and conditions) SADFO 3/2016 VESA Policy SADFO 3/2016 VESA Policy (terms and conditions)





B | CORPORAL Y | RACHEL PUGH

When I saw a request come through the system that involved the Military Working Dogs I jumped to make sure I got the task. I hadn't worked with our new Ōhakea team yet, but I was impressed with both their ability to pose for my camera, and their work-hard play-hard attitude. Before and after posing, there was plenty of time for a run around, a good old bark, and a few cuddles. This was taken in-between 'official' shots as Keno cozied up for some hugs and compliments.



Wishing you all a Meri Kirihimete and a safe and happy holiday season, from us all at the Te Tauaarangi o Aotearoa, Royal New Zealand Air Force

