

NAVY

T O D A Y

HMNZS TE KAHA
RETURNS

NEW WARRANT OFFICER
OF THE NAVY

TAKING COMMAND OF
HMNZS TAUPO

WAITANGI DAY 2021



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“You’re an 18-year-old in starting training, you’re with a bunch of strangers in the military, and you don’t have a cellphone or the ability to talk to family. You find out if you’ve got what it takes.”

~ Lieutenant Fletcher Slierendrecht,
new Commanding Officer HMNZS TAUPO



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Cannon smoke drifts past the Royal Guard of Honour.

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CPL Rachel Pugh



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New Zealand Government

Yours Aye

Chief of the Navy



I have re-crafted this message many times in the last few days as I come off the high of Waitangi and we then respond to the challenge of COVID in the community. So please forgive the multi themed tuhinga (writing) below.

Words like 'familiarity' and 'routine' are usually not inspiring concepts, but given the disrupted COVID dominated year of 2020, one could almost welcome the use of those words. And some may think it fair to think of these words in relation to Waitangi Day, as the sunshine of Northland combines with the warmth of the Navy's welcome to the Treaty Ground at Waitangi. I think of the years of looking across the grounds, seeing our ships in the bay, and our women and men in white uniforms, on parade by the flagstaff representing the Crown, flying the White Ensign, and demonstrating our commitment to Te Tiriti o Waitangi. But Waitangi Day at Waitangi is never the same from year to year.

This year's visit to Northland included a memorial dedication service marking the 175th anniversary of the Battle

of Ruapekapeka, where I was proud to walk alongside NZDF colleagues and support Her Excellency Dame Patsy Reddy, the Prime Minister and many other ministers, and the British High Commissioner, Her Excellency Laura Clarke, in honouring the sailors, soldiers and Māori who died in this conflict. In researching this battle I was enlightened further on a great historical warrior and leader, Te Ruki Kawiti. His strategic approach, his care for his people, his sacrifice, and his messaging on the criticality of a future focus resonated with me.

Of note, given his Ngāpuhi lineage, the Honourable Peeni Henare, the Minister of Defence, was a host for the NZDF and Navy at Ruapekapeka and Waitangi. This provided scope for some fun during various kōrero as to which side he should be sitting (not from me!). However, where he sat was another demonstration of the importance of whakapapa. Notably, our Minita whakapapa to both the Māori and British who fought at Ruapekapeka. He will proudly yet humbly share that story with you if you ask.

Waitangi itself followed a similar schedule of events to previous years, with multiple powhiri, hui, RNZN Band and Māori Cultural Group concerts, and ceremonial celebrations. And I once again greeted the excited students from two Northland schools, Hora Hora Primary and Paparore School fresh off HMNZS OTAGO after their Ahoy Waitangi outing. However, amongst the many slight changes, there were three things that stood out to me this Waitangi. Firstly, HMNZS OTAGO's prominence when executing her gun salute on Waitangi day - BZ! It drew significant appreciative comment from the public. Secondly, while the numbers in attendance were down by many thousands (very few tourists) the wairua/spirit was just as strong. The important discussion of the wrongs of the past, balanced by the opportunity and promise of the future, remained as strong as ever.

Continued on page 6...



TE KAHA ARRIVES HOME





Ceremonial cannon fire signalled the arrival of frigate HMNZS TE KAHA in Devonport on 20 December, finally home after nearly three years away in Canada undergoing her Frigate Systems Upgrade.

Nearly 800 family and friends lined Calliope Wharf, ready to greet 140 sailors and officers home. A small number of crew had been overseas since September 2019, as part of a caretaker team, followed by the rest of the Ship's Company in June 2020.

On a perfect Auckland morning, the ship showcased her 'look', the new fore and aft masts the most visible change in her combat systems modernisation, with a wealth of the latest technology under the hood.

Commander Brock Symmons, Commanding Officer of TE KAHA, says the project had been challenging but they were very happy with what they had got. "We've moved from a 1990's, early 2000's model, through to an iPhone 10."

The 18-day journey included a non-contact logistics stop in Honolulu, with Ship's Company unable to disembark. But it meant the passage counted as a designated quarantine period, meaning the crew could immediately greet their loved ones.

During the trip home TE KAHA trained with the USS MICHAEL MURPHY, an Arleigh Burke destroyer in the US 3rd Fleet. The pair conducted bilateral ship manoeuvres and communication drills.

TE KAHA may resume a traditional programme of South East Asia visits this year, with the ship and HMNZS AOTEAROA earmarked to attend Exercise Bersama Lima, the Five Power Defence Arrangements joint exercise, in Malaysia in October.

HMNZS TE MANA, undergoing the same Frigate Systems Upgrade in Canada, is approximately a year behind TE KAHA in her programme.

New WON for 2021



There's no place like home, says Warrant Officer Diver Lance Graham.

WODR Graham, recently returned to New Zealand, has assumed the role of Warrant Officer of the Navy, taking over from WOCWS Wayne Dyke on 29 January.

The three-year role sees WODR Graham working closely with the Chief of Navy to bring the enlisted perspective to the decisions of the chain of command.

He returns to New Zealand from Hawaii, having been posted to the

United States Indo-Pacific Command (USINDOPACOM) in Honolulu since December 2018.

WODR Graham is the second NZDF person to have been posted to USINDOPACOM, where he was part of a small Global Peace Operations Initiative team tasked with coaching and mentoring Troop Contributing Countries to develop capability and capacity for specific missions.

As heady as that role was, he says it is incredibly humbling to return to a country enjoying freedoms few others in the global community have access to.

"That, coupled with the laughter and tears in the company of whānau and friends not seen for a number of years is priceless!"

Continued from page 3...

And lastly, the 100 sailor Vice-Regal Guard used te reo māori in executing its orders – for the first time! I am very proud of this demonstration of our cultural commitment and evolution as a Navy. Amongst so many things that made me proud, it was my highlight of Waitangi 2021.

Returning to the office, I am reminded the new 'normal' is an exciting 2021 programme set against the ongoing backdrop of the pandemic. It is a full year of Naval operations and exercises, of meeting our obligations to the New Zealand Government and Government agencies, of raising, training and sustaining our personnel, and embedding new capability into the fleet.

It is invigorating to see our warfare capability – HMNZS TE KAHA – back in New Zealand. Combine this upgraded frigate (and with HMNZS TE MANA following) with the sustainment abilities of HMNZS AOTEAROA and you have a Navy that brings significant, future-proofed assets to exercises and operations with our Pacific partners. The exciting littoral capabilities of HMNZS MANAWANUI are building, as are the versatilities of HMNZS

MATATAUA, as shown in Tokelau last year and covered in this edition. HMNZ Ships CANTERBURY, OTAGO, WELLINGTON and TAUPO will continue their outstanding work in sustaining our commitments in New Zealand and the Pacific for 2021.

2021 is also a year where sailors will continue to be part of the proud team of five million keeping our people safe through our contribution to staff at Managed Isolation and Quarantine Facilities, alongside our comrades in Army and Air Force and our colleagues from MBIE, NZ Police and Ministry of Health. This is part of our new normal, to take our turn on the frontline against COVID-19 and defend our country. Over 100,000 citizens and residents have returned to New Zealand via the MIQFs and it is the professionalism and empathy of sailors that makes this possible. Thank you all, and your families, for the service and sacrifice in support of our fellow citizens.

In closing, a note to you the sailors; I am committed to meeting more of you, at sea and ashore, to hear your thoughts and ideas. Where I cannot make it, WO Lance Graham, our new WON, will be out and about representing me, just as

he represents your views to me. This is important to me, as we all have an input into our future, because we are all sailors in the Royal New Zealand Navy.

He heramana mātou o te Taua Moana o Aotearoa.

Rear Admiral David Proctor
Chief of Navy

I also take this opportunity to acknowledge the passing of Mr Stephen Ihaka on 1 February this year. Stephen, I missed you at Waitangi. I missed your guidance, your quiet but profound leadership, our discussions, your encouragement regards the promise of partnership between our people and the opportunity of the future... I missed you, I miss you my friend.

*Matua, rest in peace knowing your influence remains strong.
Rātou ki a rātou, tātou ki a tātou.*

NAVY'S DAY AT WAITANGI



It's been 181 years since the signing of Te Tiriti o Waitangi and 41 years since Te Tai Tokerau granted the Navy a charter to march through their lands. This Waitangi Day the Navy's newest vessel, HMNZS AOTEAROA, joined forces with HMNZS OTAGO to add weight to the Navy's commitment to New Zealand's historic day. OTAGO, as well as firing the ceremonial salute, provided a 'morning on the sea' to two school classes, as part of the Navy's Ahoy Waitangi competition. Corporal Rachel Pugh, photographer, showcases the action.







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Waitangi Day



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1. The drummers line up their brand-new kit.

2. Sailors prepare for the Beat the Retreat and Sunset ceremony.

3. Maritime Component Commander CDRE Mat Williams escorts Prime Minister Jacinda Ardern to her seat.

4. Guests take their seats as the 100 sailor Vice-Regal Guard stands ready on the Treaty Grounds.

5. WOET Te Kani Te Wiata performs with the Māori Cultural Group during a reception in HMNZS OTAGO.

6. Governor General Dame Patsy Reddy inspects the guard.

7. Cannon smoke drifts past the Royal Guard of Honour.

8. RADM David Proctor, Chief of Navy, with Governor General Dame Patsy Reddy on board HMNZS OTAGO.

9. Flanked by two Rear Admirals, seven-year-old Connor Petersen Hodge reprises his unofficial guard duty, following his delightful parade gatecrash two years ago.

10. Students from Paparore and Hora Hora Primary Schools wait to board HMNZS OTAGO for their morning's Ahoy Waitangi adventure.

11. HMNZS OTAGO departs Opua with students on board.

12. Lunch time on board HMNZS OTAGO.

13. School pupils prepare for their RHIB ride.

14. Children from Paparore and Hora Hora Primary Schools salute the crew of HMNZS OTAGO as they prepare to depart the ship.

15. A bit of a spin for the students before going home.



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Waitangi in Bluff

When Commodore Melissa Ross first visited Bluff 20 years ago, it was as a young marine engineer in HMNZS SOUTHLAND. This month, that southern hospitality held strong for her as she attended Waitangi Day events during the Ngāi Tahu Treaty Festival in Bluff.

Around 500 people attended at Te Rau Aroha Marae, including the Deputy Chief of Navy and a contingent of reservists from Dunedin's HMNZS TOROA in support.

She met with Energy and Resources Minister Meghan Woods and Ngāi Tahu kaumatua Tā Tipene O'Regan, as well as councillors from Southland District Council and senior Police officials.

The Royal New Zealand Navy was given the honour of replying last at the powhiri, with Chief Petty Officer Seamanship Combat Specialist Ngahiwi Walker, Navy marae manager, speaking about the ties between Ngāi Tahu and the Navy.

It was a theme explored throughout the event in speeches from Government and historians, with CDRE Ross also reflecting on Navy relationships in her speech after lunch.

TOROA reservist Leading Communication Warfare Specialist Nicole Booth, based in Queenstown, says it was a lovely day. "We got welcomed on to the Marae and we were really well looked after."

Chief Petty Officer Weapon Electrical Fitter Neil Leonard says it was "overwhelming" the response they got. "This is our second trip to Bluff for a Waitangi Day, but we haven't had DCN here before. She just fitted in so well. We couldn't have asked for a better day. DCN spoke really well, and the Regional Naval Officer LTCDR Nigel Finnerty, said he really appreciated us coming down. It was a privilege for all of us."



Top: CDRE Ross is welcomed on to Te Rau Aroha Marae.

Below: Reservists from HMNZS TOROA with CDRE Ross and LTCDR Nigel Finnerty, Regional Naval Officer.

Commemoration at Ruapekapeka



“The text etched into the stone reads: ‘Although these fallen men lie not in the heart of their own land they are in honoured company for their remembrance will be as lasting as the land in which they gave their all and where their remains are kept.’”

Ruapekapeka is one of our most precious and significant sites and bears the traces of a dark and difficult chapter in the history of Aotearoa, the Governor General, Dame Patsy Reddy told those gathered for the recent commemorations at the Bay of Islands pa.

The commemorations on 3 February were attended by dignitaries from throughout New Zealand, as well as Army and Navy personnel, and marked the 175th anniversary of the Battle at Te Ruapekapeka.

The theme of the commemoration was Kawea a Pūiri mai – in reverence, remembrance and respect.

The memorial to the twelve British soldiers, sailors and marines who died in the battle was unveiled as a lasting symbol of remembrance, courage, determination and sacrifice for all those who fought.

Their resting place was rediscovered in 2017 following years of investigation and excavation of the site. Among the find was a clay pipe, as well as items

of uniform and personal equipment. All these items were left exactly where they were found when the gravesite was re-closed.

The battle itself saw a force of 1,700 British troops, Royal Navy sailors, and Māori warriors allied to the Crown fight 500 Ngāpuhi and Ngāti Hine warriors, in the last battle of the Northern War of 1845–1846.

The unveiling of the memorial allowed the opportunity for those who attended to remember and honour the courage, determination and sacrifice for all those who fought on both sides at Te Ruapekapeka.

Dame Patsy said Ruapekapeka was part of a series of battles that began at Kororareka. “It was actually the first significant engagement of perhaps the most infamous of my predecessors, Governor George Gray. The battle began with British shellfire directed

onto Ruapekapeka Pa on the morning of 10 January 1846. By the evening of the 11th approximately 20 Ngāpuhi and 12 British lay dead, and the pa itself was alight.

“The headstone marks the site where those 12 British soldiers, sailors and Royal Marines were buried by their comrades-in-arms after the dust of battle had settled.”

Dame Patsy said Aotearoa bears the responsibility of looking after these men who for so long lay unrecognised and forgotten.

“They are now part of this land and their names are inscribed in granite for posterity. Today we remember also the immense loss borne by Ngāpuhi and the deep wounds of that conflict which have yet to heal.”

DCN ENGAGES THE SOUTH ISLAND

The South Island can seem a long way removed from the affairs of Navy. But the Deputy Chief of Navy's engagement last year impressed on the Christchurch and Dunedin communities just how connected they are.

In November Commodore Melissa Ross visited the South Island cities to deliver the Chief of Navy's roadshow to Navy regular and reserve force personnel, but she had a wider engagement in mind.

She visited the mayor of Christchurch, the Māori Trust Board of Ngāi Tahu – including retired chairman Sir Tipene O'Regan, NZ Police and Ministry for Primary Industries.

For Regional Naval Officer Commander Clive Holmes, it was an amazing opportunity to put DCN in front of some of the big players in the South Island.

“For them, to have DCN come down and be aware about what's important, was great. We had really proactive discussions. It paves the way for Navy to follow on with these stakeholders.”

~ Commander Clive Holmes

“It was a great experience. It means local bodies and government departments realise Navy is focused and eager to be engaged in the South Island. There are senior managers down here who appreciate people who get out of Wellington, come down here, and talk. Christchurch City Council appreciated that level of commitment from the Navy. We talked about what we could do better with the reserves in Christchurch, and talked about ship visits.”

It was the same with Ngāi Tahu, he said. “For them, to have DCN come down and be aware about what's important, was great. We had really proactive discussions. It paves the way for Navy to follow on with these stakeholders.”

CDRE Ross took part in the Waitangi Day celebrations in Bluff this year, which Ngāi Tahu appreciated, said

CDR Holmes. “They put a great deal of importance in the signing of the Treaty, and so the marae in Bluff was very excited to receive DCN.”

Dianne Fowler, Naval Reserves Administrator of HMNZS PEGASUS, says CDRE Ross delivered the Navy roadshow to medics at Burnham's Defence Health School and personnel serving at the Services Corrective Establishment. “Late that day she spoke to about 30 reservists here at PEGASUS. It went really well, it was very relaxed. She chatted, she told people what was going on, what direction the Navy is going in, and the obstacles ahead. You could see she supports the naval reserves and what we do. Everyone left feeling like they were part of the Navy family.”





NEW CO FOR TAUPO

Nelson man Fletcher Slierendrecht is the Royal New Zealand Navy's newest Commanding Officer, taking command of HMNZS TAUPO last month.

Lieutenant Slierendrecht, 26, assumed command of the 55-metre Inshore Patrol Vessel in a ceremony at Devonport Naval Base on 29 January.

He was asked if he would like to have his name put forward for the job, and it's a question that makes you stop and think, he says. "You picture yourself as a Commanding Officer. You ask: are you ready for it? I wasn't expecting a nomination for another year or two. But it's very pleasing to find out you've been chosen."

He joined the Navy after finishing at Nayland College in 2013. "I wasn't sure what I was going to do. A career roadshow came to Nelson, and the Defence Force had their recruitment bus. It sparked my attention and it sounded pretty cool. I'm from a very outdoor-oriented family and I've grown up with boats. My parents said, why don't you apply, give it a shot?"

He joined the Navy in 2014, aged 18, arriving in Auckland for the first time ever to start his Junior Officer training.

"It's a big adjustment, and you do question yourself. That's when you stop, look around, see the people around you. You can see everyone's similar, all doing it together, so you think, let's get it done. The hardest part about training is the cutting off of support. You've got plenty of support from your peers, but think about it – you're an 18-year-old in your first job, you're with a bunch of strangers in the military, and you don't have a cellphone or the ability to talk to family. You find out if you've got what it takes."

As a Warfare Officer, he started his training on sister ships to TAUPO, spending time in HMNZS ROTOITI,

HAWEA, then on frigates and offshore patrol vessels. He was deployed in TAUPO as Navigating Officer during that vessel's fisheries patrol mission in Fiji in 2018.

"That's my highlight, that mission. It was my first navigator job, and it was an awesome professional challenge, to take an IPV out of its usual routine and into a coral environment internationally."

Other highlights include a South East Asia tour in HMNZS TE KAHA in 2017 and an exchange with the US Navy, serving on an aircraft carrier and a destroyer.

He would tell today's year-13 students there are a lot of options in the Navy. "It's actually a pretty good lifestyle, especially if you don't know what you're doing when you finish school. The Navy will put you through study if you want to go to university later. It pays well, and the work is pretty engaging. It's a cool job."

His work with TAUPO this year will be teaching junior warfare officers their trade, interspersed with fisheries and customs patrols around New Zealand.

New Safety Event Management Tool

Prepare for 'go live' on 9 March

■ **By Commander Raymond McLaughlin**
Director of Naval Safety and Health



In my October update last year, I told you about the new NZDF-wide safety reporting and risk management tool – the SEMT (Safety Event Management Tool), and how it will help support the NZDF to look after our people and minimise the risk of harm to everyone.

In brief, the SEMT will be the place where you will report a safety event (such as an incident or accident, a safety concern, or a positive initiative or intervention – “something good”). It will also provide one place for entering and viewing safety risk assessments.

From 9 March, we will start using the SEMT for reporting all safety events and managing safety risks and stop using systems like N-SHAIR [ashore] and OSHBASE.

What about deployed ships?

During periods of deployment, ships will continue to use N-SHAIR. Events recorded in N-SHAIR will then be transferred to the SEMT so that we have a complete picture of Naval Safety in one place. This arrangement will remain in place until the SEMT can be deployed onto ships at sea.

For those with no DIXS access, reporting through a paper form will be possible.

Preparing for 'go live'

The best way to prepare for the SEMT going live is by attending an introductory overview presentation near you. These will be delivered throughout February and early March, with times and locations widely advertised. Make sure to go along to one of them.

For most people, attending the overview presentation is all the training they will require, as the new tool is easy to use. But if you want to find out more about the SEMT, visit the SEMT information page on DIXS. You can find this page via the ILP, by clicking on the 'Safety' button in the right-hand side menu. (Once it goes live, you will also be able to access the SEMT via the same path.)

If you want to talk to someone in your area about safety or the SEMT, feel free to contact NAVOSH.



Leaping from the bridge to a waiting helicopter

Lieutenant Jo Brook didn't think she would be breaking new ground when she eyed up a switch from the bridge of a warship to helicopters.

But the 27-year-old from Dunedin will soon go in the books as the Royal New Zealand Navy's first female helicopter pilot. She graduated from her Wings course at the end of January and is about to start helicopter training with No. 3 Squadron.

It's another sea change for LT Brook, who joined the Navy in 2014 after deciding a double degree at Otago University wasn't doing it for her.

"I needed to find something with a more practical edge. I'd often toyed with the idea of joining the military, but I'd always considered it something of a pipe dream.

"It wasn't until I spoke with my family about one of my childhood friends joining the Army that I started seriously considering the military."

Her role as a warfare officer took her all around the South China Sea, Australia and the South Pacific. She was serving aboard HMNZS CANTERBURY in the South Pacific, near Vanuatu, at the time and the embarked aircrew offered to take her on a helicopter flight.

"We flew around some of the islands at low level, nearby one of the active volcanoes... I thought it was just the coolest thing I'd ever done."

She was hooked, and as part of her new piloting career spent three months in the United Kingdom on a course – visiting four different squadrons for flights on helicopters and training aircraft, and helping organise one of England's biggest air shows.

She is most looking forward to low-level flying exercises.

"We can fly down to quite a low level in the Texan, but in the helicopters we'll be basically brushing the tree tops with the rotor blades."

She wasn't aware she would be the first female naval helicopter pilot until she applied.

"The bigger achievement is getting my wings, not being the Navy's first female helicopter pilot.

"I don't think I've ever been more relieved in my entire life to finally hear my checking officer tell me 'congratulations, you've passed'.

"I never considered in high school that I would ever be selected as a military pilot. I thought that because I wasn't getting top marks in maths and physics, I would never make it through.

"It took me a while to figure out that I could get good marks in those subjects, I just had to work a bit harder and want it more."



MATATAUA in Tokelau

Is a runway on Tokelau feasible?
The Government turns to HMNZS
MATATAUA to help investigate
whether that's possible.

While over 200 personnel aboard HMNZS CANTERBURY were dealing with an infrastructure delivery of solar panels and water tanks to the three Tokelau atolls in November, a quiet team of six hydrographers were helping to prove future access routes to the remote isles.

Military Hydrographic Group Team 2, led by Lieutenant David Jaquiere, was given two jobs. The first was traditionally aligned with HMNZS MATATAUA's military role – investigate and chart the sea approaches to each atoll, up to the beach.

“You have to appreciate the topography in Tokelau,” says LT Jaquiere. “The atolls drop off really quickly, about a hundred metres out. But close in, we wanted to know, can we get one of CANTERBURY's Landing Craft up the channels, to the shore? Can we get RHIBs in there? These are things we need to know because we want to be as prepared



as we can. If we get asked to support Tokelau in a Humanitarian and Disaster Relief situation, we want to know our options.”

The other task was a role normally reserved for professional land surveyors. The team were asked to provide topographical data for areas being considered as a possible runway site on one of the atolls, Nukunono. At present none of the atolls have landing capacity, making the small country only reachable by ship from Samoa.

“Dealing with beaches is pretty normal for us. But this work, for the Ministry of Foreign Affairs and Trade, was quite unique. They wanted to know, how much material would they need to bring in, to bring the land up to a certain height above sea level.”

To do that, the MATATAUA team had to provide a topographical survey map, showing spot heights above mean sea level across each site mooted as

a possible airstrip. It’s not as easy as it sounds. GPS surveys can provide spot latitude and longitude positions and heights based on a mathematical definition of the surface of the earth – the WGS84 spheroid. However, that standardised surface is not the same as mean sea level. The separation between the two can be found through matching GPS positioning with tidal observations, where the tidal rise and fall can be measured to find the mean sea level and its height on the spheroid. The difference is then applied to achieve a geodetic topographic survey accurate enough for engineering assessment.

“We only had three days to spend on it and it got quite challenging,” says LT Jaquier. “We weren’t able to put a tide gauge in close proximity, and you really need both, because the lagoon is effectively a different tidal region. It did introduce an error, but this was meant to be a preliminary assessment.”

The conditions were arduous, with 30-plus degree temperatures while wearing PPE. “It was quite hard working in mask and gloves, and we had to move a lot of the equipment around on foot. Normally we would have stayed ashore but COVID precautions meant that wasn’t possible. So we would come to the island each day, launch our boat and haul it ashore at the end of each day.”

But it went well, he says. “We rose to the challenge. It was a great opportunity to show off what we can do, even in a COVID environment.”





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Our People

1. AMT(L) Daniel Bowler enjoys a sunny Auckland Anniversary during the Seeport Festival.

2. HMNZS MANAWANUI wins the Champion of the Navy award, with LMED Max Neustroski (middle) and SLT Rebecca Smeele collecting the life ring at the Bravo Zulu Awards.

3. WOCH Steve Bourke is promoted to Lieutenant by BRIG Rob Krushka and former Chief of Navy, RADM John Martin.

4. POMUS Seleni Sulusi teaches CDRE Melissa Ross a few drum moves.

5. LT Matt Barnett assembles a MARS-L rifle on the cargo deck of HMNZS MANAWANUI during a Ship Open Day at the Seeport Festival, Auckland.

6. CDRE Melissa Ross, Deputy Chief of Navy, reviews the assembled trainees of BCT 20/02 at their graduation ceremony in December.

7. CDR Kerry Tutty, newly posted as Commanding Officer Leadership Development Group.

8. Members of the Navy's Pasifika Choir perform at the BCT 20/02 graduation.

9. Midshipmen Elliott Millar and Elliot Hails come to grips with firefighter training during the JOCT 21/01 course at Tamaki Leadership Centre.

10. SLT Samuel McMinn supervises an eager visitor to HMNZS MANAWANUI during Auckland's Seeport Festival.

11. POET Matthew Hudson works with Y13 students during the Navy's School to Seas programme at Devonport Naval Base.

Getting to grips with a ship's routine

Sub Lieutenant Grace Russell

It can be daunting posting to a ship for the first time, and Sub Lieutenant Grace Russell, fresh from JOCT graduation last year, didn't want to be a nuisance in her new posting in HMNZS CANTERBURY.



But with 'initial sea time', the nuisance factor is almost guaranteed. New officers spend their first four weeks in every department on ship, finding out how they work. And CANTERBURY, busy as she was with exercises and the Tokelau infrastructure mission in November, was the perfect place for a young engineer to find her routine.

"I was worried about being a nuisance, being in different places, changing what you do each day, and asking lots of questions. The ship has a routine of its own, and it's hard to find your feet. But the people are lovely, really helpful."

Initial Sea Time requires new officers to spend a week with each department. If I'm going to be leading people, I need to understand what they do. I need to know what it's like to be in the galley, to be up at five o'clock, standing over a hot oven all day, and then finding out why it's annoying when 200 people ask me how many chicken drumsticks they can have."

Following this, SLT Russell works with engineers on specific duties, then will be posted to an engineering job and await her turn on an overseas engineering course. "It's an awesome programme to do and perfect in terms of learning. COVID has been

hard in some ways, to get things organised, but that's the whole country."

COVID-19 had a big impact on her officer training, as it ran through the Level 4 lockdown. "I really struggled with that. The week before lockdown, we had so much to do. Then the whole country went into lockdown, and no-one could come in to assess you. We put two weeks of effort into our kit muster, and there's no-one to count the creases in your shirt. Admittedly, it did mean no-one could tell how well you had ironed your kit that day."

SLT Russell, who is from Palmerston North and Amberly, was inspired to join the Navy because she got to tackle 'real' problems. She joined via the Chatham Scheme, which involved joining the Naval Reserves and getting a small living allowance while she studied engineering. "I've always enjoyed solving problems and fixing things. Seeing how and why things work. When I read about it, it looked like it was going to be behind a desk, handling paperwork and similar problems each day. But in the Defence Force, the problems are more real. You're on the move, in coveralls most days. That's what drove me."

Spick and Span

Maintaining a tidy and orderly environment is part and parcel of a sailor's working life.

It's an ethic that's taught early on in training, as shown here with these images of Junior Officer Common Training intake 21/01 at Tamaki Leadership Centre, Whangaparāoa Peninsula.

The rounds conducted by the Officer Training School Officer (OTSO) – in this instance, Lieutenant Commander Scott McGregor – are the first formal rounds by a senior officer to check the midshipmen's standards. "It's a large area to cover," says Lieutenant LJ Littleton, the JOCT course officer. "It's the dining hall, classrooms, accommodation block, laundry, boot locker, heads and showers." In fact, the midshipmen have been working on their routine for two weeks and have experienced numerous rounds with their instructors. "The OTSO's check isn't really about picking up things that are wrong," says LT Littleton. "OTSO's staff are the ones that ensure the trainees are up to standard. We'll provide the remedials (tasks to complete to reinforce the correction). By the time OTSO walks through we, and more importantly the trainees, are ready for it. OTSO's rounds are a chance to catch up with the trainees, ask them how the training is going and check the morale."



Clockwise from top: Three midshipmen stand at ease while LTCDR McGregor looks over their racks.

A well-kept set of lockers.

LTCDR Scott McGregor talks to a midshipman as she awaits a review of her accommodation area.



Rotorua brothers began Navy legacy for family

In the wake of a tourism downturn in Rotorua, two brothers have moved from a performing arts family business to embrace careers in the Royal New Zealand Navy.

Khan and Bodean Raharuhi, Te Arawa, 21 and 19, graduated together from the 16-week Basic Common Training course at Devonport Naval Base in December, among a class of 88 trainees.

It was a proud moment for Khan, who led the Navy haka for his graduating class with skills honed at the Mitai Marae Village, his family's business.

The pair are the oldest of five brothers and are very aware they are setting an example for their siblings and wider family.

Khan had also been working as a tour guide at Rainbow Springs after finishing at Western Heights High School, but had wanted to join the Navy since he was a teenager. The pair love the sea and are strong surfers. "I had been doing applications for a while, but I didn't get properly into it until I was 20.



What pushed me was having a son. I thought, I needed to do something, to create a legacy for my family.”

Bodean followed his lead, and the pair did a police preparation course at Toi Ohomai Institute of Technology to prepare them for the rigours of Navy training.

They started in August, just as Auckland went into Level 3 lockdown. It meant the trainee entry into Auckland had to be carefully managed, with buses delivering recruits to the base.

The brothers were fit, but there was homesickness. “You make a lot of friends in training. They know what you’re feeling, because it’s the way we’re all feeling. Mail from my parents helped me through, and having my brother there was great. But there

are so many highlights, so many new things we’ve learnt.”

Bodean says he kept himself on track by thinking of his family and the future. “My brothers, they’re looking at us as big role models. We didn’t want to let them down.”

He enjoyed some of the toughest parts of the course, such as ‘Shakedown’ Week which tests trainees’ endurance. “You think you’re slowly improving, but during those weeks you see this massive difference, compared to how you were at the start. It makes you feel good.”

Bodean and Khan say they are excited about starting their trade training next year in the Seamanship Combat Specialist role. These are the experts in seamanship operations, including gunnery, seaboat operations, boarding of vessels and ship security.

Khan’s advice to others is to give it a go. “It’s an amazing experience. You’re doing things very few people get to do. I’m hoping some of my family follow in my footsteps.”

Bodean says it might be tough at first, but it gets way better. “Just go hard. You feel good about yourself. You feel proud.”

“It’s an amazing experience. You’re doing things very few people get to do. I’m hoping some of my family follow in my footsteps.”

~ OSCS Khan Raharuhi

Science & Engineering

Preparing us for the future

Who provides the science and engineering know-how behind the Royal New Zealand Navy fleet? RNZN Chief Naval Architect Chris Howard explores the Navy's partnership with the Defence Technology Agency (DTA).



A safe and capable fleet owes a lot to technology. In New Zealand's case, these gains are made through the collaboration and combined expertise between RNZN naval engineering and DTA.

DTA is made up of about 80 civilians who add a depth of scientific expertise and understanding to where it is needed across the NZDF. This includes assisting the Chief Naval Engineer, Captain Richard Walker, and his team, the Naval Engineering Authority (NEA) to be an intelligent engineering customer for future vessels, and to address challenging in-service technical issues. This partnership encompasses a range of specialist domains including platform engineering, materials engineering, environmental science and human systems.

The resulting science supports important outcomes for Navy.

Understanding the science of Southern Ocean waves

The Southern Ocean, off New Zealand, contains some of the world's roughest seas. This clearly has big implications for the design and operation of RNZN ships. However, until recently, the sparsity of shipping in these waters meant that actual wave conditions were not well measured, and wave/weather models were poorly calibrated. This has been addressed by DTA through an ambitious programme of data capture from wave buoys deployed south of New Zealand. The clever bit from this is that DTA (in collaboration with others) has managed to produce a vastly improved statistical picture of these sea conditions. This 'wave atlas' defines the sea conditions we can expect RNZN ships to encounter, including extremes that ships must survive. (The largest wave height so far recorded in the Southern Ocean is 23.8 m!) This data is now used to set better seakeeping requirements for the design and operation of future RNZN ships. Ultimately, on the back of this work, the design requirements will better match the actual conditions.



From left to right: Selfie by Chris Howard on HMNZS WELLINGTON.

Ice coats HMNZS WELLINGTON in the Southern Ocean as DTA undertake an icephobic coating trial.

Experiments with anti-fouling paint in 'stripes' on the underside of a vessel.

DTA investigation of broken turbine blades from HMNZS CANTERBURY's engines.

Re-thinking biofouling management

The Navy has long used antifoul paint on ship hulls to help control marine growth that adversely affects performance and fuel economy. However, the primary driver for this has recently shifted. We must now meet new, and much stricter, biosecurity requirements to prevent the spread of potentially invasive marine pests into and around New Zealand. To comply, it initially seemed that the Navy would require a burdensome regime of ship in-water cleaning and dry-docking. However, thanks to a programme of DTA experimentation, a better solution has been found. Independently evaluating the performance of many alternative anti-foul coatings, a modern commercially available coating was identified that is very well suited to most RNZN ships and operating conditions. The Navy has updated its paint specifications and policies accordingly. Importantly, we can now comply with the strict new biosecurity requirements without a need for continuous hull cleaning, while still seeing the performance benefits.



What else?

Other examples of reward from applied research are:

- DTA metallurgists and engineers providing advice that seeks to slow the tide of corrosion and structural fatigue that can ultimately lay waste to a naval ship.
- Advice from DTA fuel specialists and fuel quality testing which assures that our engines will keep turning.
- Getting to the root cause of mechanical failures.
- Human factors, notably the human-machine interface, being treated as integral to ship design, such as with the layout of the recently upgraded Anzac frigates' Operations Room.

DTA also does ship monitoring and data acquisition work that enables vast amounts of ship sensor data to be captured from ships at sea (the easy part), through to making intelligent decisions from it (the harder bit).

In future, the data could provide operator guidance and monitoring of ship operation that helps to quantify and minimise RNZN greenhouse gas emissions. Recently, we have used such systems to capture data towards validating the seakeeping performance of our ships, and better understanding operational limitations. This included a seakeeping trial of HMNZS CANTERBURY in July 2019, involving both DTA and NEA personnel, that enabled more accurate modelling of her performance in rough seas and ultimately, led to a relaxation of her operational restrictions in high sea states.

DTA is helping the Navy maintain an eye to the future – preparing naval engineering for the Navy after next. However, DTA does not always have all the answers in-house. Instead, together with the NEA, it makes use of strategic relationships and networks, including partner Navies, academia, and industry.

The NEA is able to directly exchange technical information with its ABCANZ (American-British-Canadian-Australian-NZ) naval counterparts for areas such as Ship Materials Technology, Survivability, Hydromechanics, Fuels and Structures. Similarly, DTA has formalised relationships with these same countries through The Technical Cooperation Program (TTCP) of government defence research agencies, where specialist collaborative research and information exchange takes place.

These relationships help Navy stay on the front foot with changes to technology. For example, the RNZN fleet is gradually transitioning from camouflage grey polyurethane naval topside coatings, to a much more resilient polysiloxane-based, haze grey paint system that was developed by the Australian Defence Force and their Defence Science Technology Group.

As a relatively small defence force, the NZDF can utilise its organisational agility to enable technology trials. For example, RNZN Offshore Patrol Vessels have tested US Navy-developed novel icephobic coatings at sea, in Antarctic waters.

Such NEA-DTA work is challenging and rewarding. For the interdisciplinary team of scientists and engineers that work together the science can be fun, as well as clearly purposeful, with their work contributing long term safety and capability benefit to Navy.



Honorary Captains

■ **Professor Stephen Hoadley PhD**
Honorary Captain since 1 October 1998

My contribution to the NZDF began with invited lectures on international affairs to the Command and Staff College, then of the RNZAF at Whenuapai, in the 1970s. Two decades later I was named an Honorary Professor of the College, now a tri-service institution located at Trentham Military Camp, and two decades after that, in 2019, a classroom was named for me, the Hoadley Room.

Meanwhile the Royal New Zealand Navy had recruited me to deliver modules on politics, international relations and security to Navy midshipmen in the Junior Officer Common Training cohorts twice a year. This was extended to twice yearly modules for chiefs preparing for promotion to Warrant Officer. During this time I had the opportunity to meet a succession of commanding officers, commodores-Auckland, and Chiefs of Navy, less for my own social virtues than for those of my wife Wyn who was a city councillor, then mayor, of Takapuna. Furthermore, we encouraged our daughter Jennie to

join the RNZNVR. She subsequently proceeded from boot camp to officer rank, then to Commanding Officer of HMNZS NGAPONA, and then to Naval Staff under RADM John Martin and Institute of Leader Development under RADM David Proctor, now with a regular Navy rank of Commander.

During the past decades I had also been active as a media commentator and public speaker with a reputation, I believe, for fairness and balance toward the Defence Force, in contrast to prominent critics of the military profession and armed preparedness. I wrote a book entitled *New Zealand United States Relations* (2000, rev 2017) in which I reviewed defence cooperation sympathetically at a time when public anti-American, anti-nuclear and anti-war sentiments ran high. Appointment to government advisory committees on topics such as aid, arms control, and intelligence, and invitations to briefings by the Navy, NZDF, Ministry of Defence and Ministry of Foreign Affairs, and encounters with MPs and ministers,

kept me not only informed of defence and security policies but also respectful of the quality of those men and women who made and implemented them.

I believe it is for these reasons that in 1999, Rear Admiral Fred Wilson, then Chief of Navy, and Commodore Peter McHaffie, Commodore Auckland, invited me, Wyn, and Jennie to the PHILOMEL Officers Mess to receive the appointment as Honorary Captain. Since then I have continued, by lectures to officers and commentary to media, as well as through my academic lecturing and writing, to report fairly and objectively on the initiatives and actions of the uniformed personnel who staff, and the civilians who support, the New Zealand Defence Force, and particularly the Royal New Zealand Navy.



From left, LEWS Daniel Lord, CPOWTR Bart Couprie, POMT(L) Stace Greer and CDR Rob Welford, with a UH-1, 'Huey' helicopter formerly used by the MFO, on display on the Parade Ground at South Camp.

Sailors in the Sinai

■ By CDR Rob Welford

Bringing your Navy skills to an operation doesn't always mean being at sea. The Royal New Zealand Navy is currently contributing four staff to the latest rotation of peacekeepers in the Sinai Peninsula in Egypt, as part of the Multinational Force and Observers (MFO).

Operation Farad, as the deployment is known, involves 30 New Zealand Defence Force peacekeepers. It's mostly Army, with four from Air Force, and four Navy personnel. After a period of routine quarantine, on entry to Egypt, Commander Rob Welford, Chief Petty Officer Writer Bart Couprie, Petty Officer Marine Technician (Electrical) Stace Greer and Leading Electronic Warfare Specialist Daniel Lord started their MFO duties in the second week of November.

The origins of the MFO lie in the 1979 Treaty of Peace between Egypt and Israel, which was brokered by US President Jimmy Carter during the preceding Camp David talks. The two Treaty parties, Egypt and Israel, undertook to request the United Nations to provide a force and observers to supervise the implementation of the Treaty, but when this was not possible, they negotiated a further protocol establishing the MFO "as an alternative" to the envisioned UN force. The protocol was signed in 1981, and the MFO was established on the 25 April, Anzac Day,

1982. Since then, New Zealand has contributed Defence Force personnel to the force continuously. Command of the force rotates between nations, and the current commander is Major General Evan Williams, NZ Army.

Navy personnel bring their specialisations to the mission. CDR Welford, a Warfare Officer, is employed as the Force Commander's Executive Officer in the Headquarters at the MFO's South Camp near Sharm El Sheikh, responsible for management of the Commander's programme, and coordination of staff effort in support of the force mission. CPOWTR Couprie, a Personnel Administration Specialist, is responsible for the New Zealand contingent's administration, documentation and financial aspects. POMT(L) Greer is employed as the camp electrician, supporting domestic appliances and infrastructure for the whole base. LEWS Lord is an analyst in the information cell, collating information from within the force, as well as external sources, to provide briefing material and assessment to inform the planning and conduct of operations.

On a day-to-day basis, the mission of the MFO is to Observe, Verify and Report (OVR) military and troop dispositions in the Sinai Peninsula and the areas adjacent to the International Border Line in both Egypt and Israel. The Force also plays a significant role in facilitating dialogue between

the Egyptian Armed Forces and the Israeli Defence Force. In practical terms, most of the OVR mission is conducted by the Civilian Observer Unit, with security, transport, planning, and logistical support from the military contingents, although it is emphasised that every member of the MFO is an 'observer', and the ability to recognise both Egyptian and Israeli military equipment is a core skill that is trained and practised regularly. Similarly, the Facilitation mission is conducted by providing planning, security, transport (including fixed wing aircraft and helicopters) to shuttle Treaty Partner representatives and VIPs between the two countries, and also to host meetings and dialogue at 'neutral' MFO bases and facilities.

Given that in the 30 years preceding the Treaty of Peace, Egypt and Israel had fought four wars, but in the 38 years of the MFO there has been peace, the MFO mission is, arguably, one of the most successful peacekeeping missions ever. Whether or not that particular claim is true, there is no doubt at all that the MFO has played a critical role in maintaining stability in the Middle East, and that the NZDF contribution has made a significant difference. As their predecessors have been, and their successors will be, the four sailors deployed today are proud to be playing their part as 'Servants of Peace'.

Whangarei Doctor keeps Covid watch on Navy Ships

A long-standing Whangarei GP who reinvented herself as a Royal New Zealand Navy Surgeon Lieutenant is now on the front line for COVID procedures for Navy ships going to the Pacific.

Lieutenant Kim Rapson, 52, had been in general practice for 20 years and was looking for a new challenge.

“There was an underlying desire to join the Navy since youth and over the years, I had always noted the New Zealand Defence Force advertisements for a doctor position. You know how you have those moments, where you progress through life ready for a challenge, then it presents itself. It was a huge step to join the Navy, but everything came together at the right time.”

She joined the NZDF in 2019 as a civilian doctor initially, working for six months at Devonport Naval Base’s medical centre. “I could have stayed as a civilian, but I wanted to be in the military, to justify making the giant leap of leaving the practice and my home, and deployments really appealed to me.”



It meant undertaking 22 weeks of officer training at Devonport Naval Base at the start of 2020, extended to 26 weeks as New Zealand enacted a Level 4 COVID lockdown.

“Overall, the physical requirement was not as bad as I thought it would be. I found the basic military disciplines hard at first, like marching everywhere, addressing authority correctly and remembering always to wear my hat. Giving orders was also strangely challenging. As a GP, you don’t tell people what to do, you encourage them to make their own best choices.”

She says it was a surreal time during the COVID lockdown. “You felt powerless during a population health emergency. We were confined to close quarters with little privacy and it was difficult to continue the planned training programme.”

Her husband and three teenage children were big supporters of her decision. “It was a big adjustment for the family and it forced them to learn many domestic skills. But it was okay, I think they still love me.”



Graduating as Midshipmen, doctors are then automatically promoted three ranks to Surgeon Lieutenant, with a scarlet stripe between their gold bands to indicate their medical status. In November LT Rapson deployed with HMNZS CANTERBURY as part of a medical team during a four-week infrastructure delivery of water tanks and solar panels to the Tokelau atolls.

“There were two medics and two medical assistants on that trip. There was a lot of teaching and learning. We did COVID screening of the personnel each morning at 0530, prior to the start of the day’s unloading. We attended to personnel who came to sickbay and ran the hospital section on CANTERBURY as an isolation ward.”

Her advice to those considering a career in the Navy is to be prepared for a challenging adjustment to military culture. Keep fit, be adaptable and be prepared to move out of one’s comfort zone, she says. “The entire team making up the Deployable Health Organisation and Force Health Organisation are a great group of people as we work around the many challenges. I feel really fortunate to have been given this opportunity.”



Right: WOWT Wayne Morris is promoted to Lieutenant, with his wife and Chief of Navy RADM David Proctor handling the rank slides.

Senior rate to ‘junior’ officer

Wayne Morris’ “happy place” involves a new-build forever house, in native bush so high above a bay at the Whangarei Heads, the boats below look like toys.

In other words, he’s trying to retire after 44 years in the Navy, including 24 years as a Warrant Officer Weapon Technician. But he’s an ongoing member of the Anzac Frigate Systems Upgrade Integrated Project Team. HMNZS TE MANA is being upgraded in Canada, so he needs to be around for most of 2021 – beyond his contract as Warrant Officer.

The tidy, albeit rare solution, is a promotion. On 18 December WOWT Morris, an extremely senior rating, became Lieutenant Morris, junior officer.

Commissioning from the Ranks (CFR) under the Midshipman Scheme is not unusual. Sailors, with the blessing of their Divisional Officer and career manager, can attend the Junior Officer Common Training course, alongside

those joining the Navy for the first time. Able Rates and Leading Hands do the full 22 weeks, while Petty Officers and Chief Petty Officers do the final 10 weeks. Warrant Officers, due to their vast knowledge and Naval experience, require no officer training. They become Lieutenants, while the other CFRs become Sub Lieutenants or Ensigns depending on their rank.

For LT Morris, there’s no difference. “In order to get to the finish line with TE MANA delivered back to the NZDF, I needed more time. This satisfies the organisation’s desire to retain my services and free up some head room for the advancement of Chief Petty Officers. I do the same role, just the rank slides are different. It’s a means to an end.”

For those that know him, nothing has changed. “I’ve just finished having a conversation with a Commodore that a Lieutenant would normally not have,” he says. “I’m old shipmates with some of them.”

But across the wider NZDF the perception could be different. “The adjustment for me, in the twilight of my career, is realising that respectfully providing an unvarnished opinion to the leadership as a WO of 24 years’ experience may not be seen in the same light coming from an unknown Branch Admin Lieutenant.

“In the broader NZDF, there are some amusing perceptions. I’m reminded of a story from a friend who also commissioned from WO to LT. He was on a train to the city when he overheard a couple of military personnel say, ‘he’s an old Lieutenant, I wonder what he did wrong?’”

He never had aspirations of becoming an officer. He joined the Navy in January 1977, straight out of Napier Boys’ High School in Hawke’s Bay. “Back then, as a 17-year-old, officers. I don’t want to oversell it, but officers were demigods, or maybe aloof is a better description. Fortunately the divisional system, some 260-odd years in the making, provided the communication bridge with Senior Ratings as the conduit. I was quite happy working with my hands, advancing through the ranks to reach the pinnacle of the trade job – a Weapon Engineering Warrant Officer (WEWO) on an Anzac frigate on an operational deployment.”

His final work – as an officer – will be to join the Project team in Canada to see out the upgrade and reactivation of TE MANA. It’s his fourth time to Canada for the work on HMNZS TE KAHA and TE MANA, and when he was last there in 2019 he saw TE MANA “completely gutted”. It was strange to see her in that state, he says. “But it is awesome to see them take shape. They will be a great couple of ships, and this work will make our ships relevant.”



What's on the beach?

Experimenting with Uncrewed Aerial Systems

It's a Navy hydrographer's role to obtain beach reconnaissance data ahead of an amphibious landing, but what if it's too dangerous to survey the approaches and the beach?

Some time ago Colin Moore, the Joint Experimentation Manager – Maritime, recognised an opportunity to use an Uncrewed Aerial System (UAS) as a specialist Littoral Warfare tool.

During an experimentation trial with a Very Shallow Water Rebreather system, a beach recce was conducted by divers as part of the trial scenario.

Upon observing this, Mr Moore thought there had to be a better way. Why not do the reconnaissance from the air?

"It's the idea of having a sailor in a high-risk area, on station, against doing this remotely, off-station. I thought, a UAS with high resolution imagery – it's the way to do it." Digging deeper, he found the hydrographers at HMNZS MATATAUA had already started to form some ideas combining UAS, positioning data and photogrammetry, but nothing had been tried.

This is not as simple as flying a drone over a beach to get aerial pictures. An amphibious force needs to know the beach topography – the slopes, the hills, the dips and the ditches – before they commit to a landing with vehicles and personnel from landing craft. A Rapid Environmental Assessment (REA) by MATATAUA can deliver all that, if their hydrographers have the freedom to get on the ground with GPS equipment and survey the approaches and beach, but they can't do it in a non-permissive environment.



PHOTOGRAMMETRY

Photogrammetry is the capture of multiple photographs of a landscape. When pieced together into a point cloud and combined with Geo Referencing, a 3-D model can be generated with all the geo data needed to situate it in a specific time and place.

Civil engineers were way ahead with drone mapping, and the US Army engineers were also looking at the concept, but no-one had used a UAS in quite this way before, says Mr Moore. An endorsement from the Naval Capability Board kicked off a

Above: The team prepare to hand-launch a fixed wing UAS from a RHIB near Whangaparāoa Peninsula.



Left: An operator reaches up to retrieve a Mavic Pro drone while in a zodiac on Lake Moawhango.

Below: A hydrographer from HMNZS MATATAUA trains in the operation of a UAS.



three-year “Battle Lab” to explore and prove the concept of remote beach intelligence. This Battle Lab needed to look at a range of platforms, sensors, training and policy, and to this end, drew significantly on the NZ Army’s development and experience in UAS.

Battle Labs are about taking something off the shelf and putting it through a range of experiments that explore the impacts on Personnel, Concepts and doctrine, training, integration, logistic and equipment, says Mr Moore. “It’s about ‘learning by doing’, by reducing risk through investing some money to having a look at a capability concept and saying, that is or isn’t going to work for the NZDF. In this space, a fast failure is not necessarily a negative outcome – it’s less time wasted in the long run.”

During the Battle Lab’s three years, commercial off-the-shelf and military off-the-shelf UAS were explored, and data processed through representative photogrammetry software. Fixed wing and quad copter platforms were looked at. All had their pros and cons. In the end, the Battle Lab informed the basis for

user requirements, including one key piece: the ability to be launched and recovered from Royal New Zealand Navy small boats such as zodiacs and RHIBs. These activities were focused primarily at Lake Moawhango, deep in the military training area on the Central Plateau, but also at Kaipara Air Weapons Range and around Whangaparāoa Peninsula. The Navy was spending so much time on the lake that some were referring to it as HMNZS Moawhango.

Discovering if a UAS could actually collect Remote Beach Intelligence was one thing, but it needed operators who could fly the system and process the data. So the Battle Lab explored the feasibility of raising, training and sustaining an operator capability within MATATAUA, with an understanding of our obligations under both Civil Aviation Authority policy and NZDF airworthiness policy.

The Naval Capability Board has since endorsed the initiation of a Littoral Warfare UAS capability project, which should deliver into service a Littoral Warfare UAS capability within MATATAUA later this year.

While the primary role of the Littoral Warfare UAS is REA data gathering, it also has an Intelligence, Surveillance and Reconnaissance (ISR) capability. It means it could work across a range of naval operations, including over-watch for boarding parties and collecting evidence during Fisheries or Customs patrols.

Lieutenant Commander Robin Kuhn, Littoral Warfare Capability Manager, says: “While the use of autonomous systems is not completely new to RNZN, as we already use Autonomous Underwater Vehicle systems, this will be the first time the Navy will be using a certified UAS capability. This is an exciting new technology for the RNZN and will help with recruiting people into the Navy and to exciting roles in HMNZS MATATAUA.”



Pasifika beat catches on

Leni Sulusi is a future-minded man. In his younger years he was playing for the Auckland Warriors reserve team with an eye on a Warriors jersey. Today, he's a professional Royal New Zealand Navy musician with an eye for the growth of Pasifika in the military.

The Deputy Chief of Navy recently commended Petty Officer Musician Sulusi, both for his commitment and dedication to the band as a percussionist, and for creating the Ceremonial Drum Corps and the Pasifika Choir.

He joined the Royal New Zealand Navy band in 2006, discharging in 2008. He re-enlisted in 2013. He cites his passion for rugby league as the reason for the time away.

"I was focused on becoming a professional rugby league player, and I was also studying part-time. I got into the Vodafone Warriors reserves team, the Auckland Vulcans. I wanted to do something with my sports while I was young. Your body has a limited time frame."

By 29 he realised it wasn't going to happen. "And then I found out I was going to be a father. I thought, well, there's not a lot of opportunities for full-time work for a musician. So I came back to the Navy, and it's really worked out."

POMUS Sulusi revived the Navy's ceremonial drum corps in 2018, training other trades to use drums for marching and ceremonial duties. It's a qualification, with a drummer's badge issued. It appeals to the Seamanship Combat Specialist trade, as ceremonial duties are traditionally their domain, but anyone can do it, he says. "We've just trained the first female drummer, Able Electronic Warfare Specialist Lua Tufuga. People email me, we set up lessons, and it's done in their own time."

POMUS Seleni Sulusi receives a DCN Commendation from CDRE Melissa Ross.



POMUS Seleni Sulusi talks to his colleagues following his commendation.



Members of the Pasifika Choir perform at the BCT 20/01 graduation. POMUS Seleni Sulusi can be seen at the rear.



Navy and Army members of the Pasifika Choir dance during the BCT 20/01 graduation.

The Pasifika Choir was inspired after the band went to Tonga in August 2019 to participate in the 60th birthday celebrations of King Tupou VI. “We worked with the Tongan police band, the Australian Army, the Fijian Army. We were blown away by the other bands but I felt, we didn’t have enough cultural repertoire. We didn’t emphasize Maori and Pacific culture enough and I was quite disappointed. We’re a Pacific nation and we’ve got a lot of cultures. I said to the boss, we need to do something.”

It was about the same time that the Royal New Zealand Navy Pacific Island Community Group was formed, and POMUS Sulusi tapped into that resource. “The word went around that we wanted to create a choir, and people put their hands up.”

The Pasifika Choir’s first gig was during the Basic Common Training graduation in July 2020, and it is now has a regular slot for subsequent graduations. Their repertoire has expanded to dance and drumming, and they were later invited to a Pasifika Festival.

Being part of the group, with between 30 to 50 members, takes a lot of commitment for both POMUS Sulusi and the members. Rehearsals are outside work hours. His citation notes POMUS Sulusi convinces others to give up their time freely through dedication and example, often working extended hours to support and deliver rehearsals and performance opportunities. As well as encouraging others to give up their free time, he provides a welcoming environment for them at the RNZN Band Room, encouraging whole families to attend rehearsals.

It isn’t just Navy; there are members from the other services. “It’s all about promoting diversity domestically – maybe internationally one day. It’s about encouraging Pasifika people to join the military. The choir, and the community forum, it’s growing the social side of things. There wasn’t an opportunity before for Pasifika people to gather in one place, apart from sports. So now we’ve opened that up. The great thing about it is, people can come along, including families, and spread the word to others that there is something for everyone.”



All about the Wardroom

For the first time, trainee midshipmen will undertake a ‘Wardroom Living Module’ as part of their Junior Officer Common Training course. This month JOCT 21/01 had two hours in HMNZS TE KAHA, then another hour at the HMNZS PHILOMEL wardroom. Lieutenant LJ Littleton, JOCT course officer, says the idea is to set up the trainees for success when going onto a ship and joining a wardroom. “They need to know where to find the mess rules and know who they should be talking to in order to enjoy their home away from home.” The officers receive a separate lesson in table etiquette towards the end of their course.

Did you know?

The act of drawing a sword in the Wardroom Mess without permission is punishable by a fine. The object of this is to avoid misinterpretation, particularly in the days when duelling was prevalent.

The Royal New Zealand Navy Journal – *out now!*

The inaugural edition of the Professional Journal of the Royal New Zealand Navy (Volume One, Number One, December 2020) is now available online.

You can find it at www.nzdf.mil.nz/navy and click on ‘Public Information’.

The Journal is a medium for critical and well-informed thinking on Naval and maritime affairs.



ROY COLIN SEFTON QSM
Petty Officer Radioman NZ15394
21 June 1938 - 5 January 2021

Operation Grapple veteran Roy Sefton was farewelled in a service in Palmerston North on 11 January.

Mr Sefton, the President of the Operation Grapple Group, was a tireless advocate who fought for official government recognition of the genetic damage suffered by the veterans of nuclear tests in the Pacific. For this work, he was awarded the Queen's Service Medal in the 1999 New Year's Honours. Sefton himself served in HMNZS PUKAKI during Operation Grapple, a series of nuclear tests – involving both atomic and hydrogen bombs – conducted in the mid-Pacific by the British Government from May 1957 to September 1958.

Many of the veterans of Operation Grapple featured in a Denise Baynham photographic exhibition at the Navy Museum, which concluded last month (*Navy Today* #248).



VOLUNTARY EDUCATION STUDY ASSISTANCE (VESA)

Semester One, 2021 applications are now 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 IUP 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 nzdclearnvesa@nzdf.mil.nz

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