

THE EYES and EARS

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Detachment 131 Divisional Locating Battery RAA

Unit Citation for Gallantry (UCG) awarded to the Detachment and those who served at
The Battles of Coral/Balmoral in South Vietnam, 1968

2022 – 56 Years and the Detachment 131 Spirit Lives On: 1966 – 1971



September, 1967 RTA'ers –

William Thomas, Barry Bonser, Jim Hognno, Allan Adams, Mick Luff, George Clark, Peter Gault (Late), Phil Endicott, Barry Follington, Steve Boutlis, John McFadden and Ross Gunnell

September, 1968 RTA'ers –

IAN AMOS - Hi Paul, the attached photo was taken by me 17 September 1968 at Saigon airport.

Left to Right - **Gordon Malcolm, Ken Woodbine, Geoff Holden, Bob Billiards, Nick Armstrong.**

**They don't look very happy to be heading home!!
Ian."**



RTA Project for 2022

How about you send me Return To Australia (RTA) photos ASAP, so I can continue on from January – we're now up to September's groups?

Just off the top of my head (well there are a heap of names from photos above!) here are the names for a September –

1966 – Franz Perry (Late)

1967 - William Thomas, Barry Bonser, Jim Hogno, Allan Adams, Mick Luff, George Clark, Peter Gault (Late), Phil Endicott, Barry Follington, Steve Boutlis, John McFadden and Ross Gunnell

1968 – Ian Amos, Gordon Malcolm, Ken Woodbine, Geoff Holden, Bob Billiards, Nick Armstrong, Michael Young, Stan Briggs, Frank Pepper (Late).

1969 – Quenton Knight (Late), Stephen Fowler, Les Smithlester, Kevin Browning

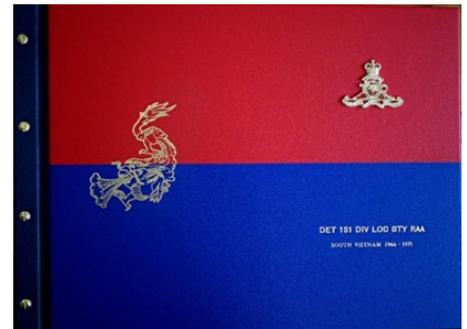
1970 – Ian Morris (RAEME), Ian McMillan

1971 – Rex Arnold

1972 – John Tickle

Is there anyone else?

. **The “Detachment Album Project”** – This project is sponsored by the 131 Locators Association and is in need of some photographic and by-line input from our members/Readers.



Anyone got a name?

The “Lost Locator Project”

This Project is being re-ignited for 2022.

Our current list contains the names of **117** Locators (as at 01.01.22) that we have not had contact with since basically commencing communications in 2012, so, we thought this year is as good as any to try and reduce this number.

However, this doesn't mean that we still have contact with the total number of Battery/Detachment members we have Located over time as continuing correspondence has lapsed in a lot of cases.

We regularly check bereavement/funeral notices and this does not locate members in the way we really want to. So, we're appealing for YOUR help in scouring all sorts of sources – local RSL's may not a good starter.

Get in touch with me via 131eyesandears@gmail.com

Paul Dickson

. Insights and Recollections...

This topic/s have raised so much interest – we're still in the middle of some really great discoveries with some remarkable memories being brought to life.

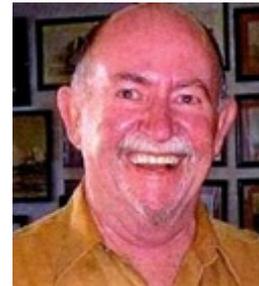
The series will continue on the receipt of more Insights and Recollections, so if you would care to contribute, please send your Insights and Recollections –

Paul Dickson at - 131eyesandears@gmail.com

Ed – The following is a continuation of a series, commenced in June's *Eyes & Ears*, taken from an unfinished book by Jeff Evans. Jeff gave the contents to Kevin Browning and he has made it available for us to publish in *Eyes & Ears* and to be archived on the Association's website.

NB – Please note that the contents are Jeff's words and have not been edited/alterred. You will see his "notes" and markings (eg. xxxxxxxxxxxxxx etc) needing further attention by him and so on. Please accept the fact that Jeff was fastidious in his research and still had so much information to follow up on, which included research of documents and interviews with fellow Gunners.

"Gunners in Vietnam, 1965-1971" aka by Jeff initially as – "the book"



By Jeff Evans

Edited by Paul Dickson
in conjunction with Kevin Browning,

Chapter 9 Artillery Survey

An Overview

An Artillery Survey Section of one Officer and 26 soldiers deployed as part of the original 131 Detachment in May 1966. The Section Commander was Lt Peter Sadler, assisted by Survey SGT Grahame Hislop, and BDRs Keith Holloway, Norman Bullen, Ian Board, Karl Doehrmann, James Sellwood and Barry Uren. **HMAS Sydney – any surveyors on board with Townley?**

The surveyors operated a variety of equipment designed to provide survey to locations in the same manner as civilian surveyors were employed to do. The primary objective of the surveyors was to provide very accurate survey to the guns of the regiment and US gun units attached to the Task Force, weapon locating equipment including the mortar locating radar and sound ranging sets, Listening Posts and Advance Posts, as well as infantry battalion mortars as requested. Additionally, they provided a number of 'bearing posts' with bearings to a number of features, so that the soldiers and officers of other units could calibrate their compasses. However, the surveyors were to be involved in much more than these tasks, but not in the first months.

As previously mentioned, there were never enough soldiers to cover all daily tasks, with LP duties, kitchen duties, local protection and development of defences. In addition, Topographical Surveyors required assistance in establishing survey control points throughout Phuoc Tuy Province. The surveyors were to become involved in all of these tasks, for a variety of reasons.

First, it was essential to provide sufficient soldiers to cover all of those tasks listed. To simply not have enough personnel on local protection was unthinkable; to not contribute to the provision of food as kitchen hands would probably have initiated a mutiny; as radars and LP were deploying, they were frantically working to ready equipment and defences in their respective areas. The slack was taken up by the artillery surveyors when any survey scheme had been completed, and generally, for a battery deployment, this would take one or two days at the most. Once the Task Force was well established, and the guns and radars deployed on an infrequent basis, certainly in the latter years, there was a period of down time for the surveyors.

Second, there were no survey control points in the province from which to carry survey to the guns, radars and other equipment. The Task Force was waiting for US Army surveyors to carry survey control from adjacent provinces, so that the Australian Topographical surveyors could establish that survey around Phuoc Tuy.

Third, the Artillery Surveyors used their spare time wisely by conducting a six-week training course which commenced about one month after their arrival in Nui Dat. *“The aim of this exercise was twofold:*

To train surveyors in an operational role.

To prepare BP’s along the road VUNG TAU – NUI DAT which may be used as alternate gun/radar positions¹.”

A short time into the course, and it was abandoned so that the surveyors could be used to bolster defensive works. In the Operational Report of September 1966, CAPT Barry Campton said that, *“The survey section has now been absorbed into the LP; all training has ceased and the provision of artillery surveyors in this theatre is the subject of a paper in discussion with BC 131 Div Loc Bty, Holsworthy¹.”* Clearly, there was no surveying done in the month of September 1966, nor was there any in October; two surveyors were attached to the Meteorological Section of the Target Acquisition Battery (US).

Considering the short notice given for deployment to Vietnam, and the actions necessary to have all personnel at DP1 standard by the due date, it is not surprising that some units needed to conduct training in-country to bring the soldiers up to an operational status. The Detachment’s aim was to essentially conduct a Basic Surveyors Course and qualify all personnel in the Section. Then, as time permitted, conduct an Advanced Survey Course to bring everyone up to a higher standard, and give the planners the greatest flexibility of employment within the section. Given the number of ‘extra duties’ in which the surveyors would become involved, this made sense. The School of Artillery would be asked to grant permission for the Detachment to qualify soldiers at Advanced Surveyor level.

Why the need for Survey?

During the Vietnam era, no matter where an army deployed, the maps for that area were a fundamental necessity. All ranks, irrespective of their Corps of origin, would be using the same maps. This meant that when a location was given, by anyone, all recipients would plot the same location on the same maps. All units would know where all other units were, on the map, and so be in a position to make allowances for their locations. This allowance was essential for artillery fire, which could range up to eleven kilometres for the ANZ guns, and up to three times that range for US guns.

Furthermore, a location produced by a weapon locating device is a location related first to the location of the device, and second, to the location of that device in relation to the map. The more closely coordinated that the device is to the map, the more accurate is the location which will be given to the guns to originate CB fire. Similarly, the closer the guns are related to the map, the more accurate will be their supporting fire, all other things being equal. The locations used by the gun and radars in their calculation for range and bearing, had to be directly related to the map. Therefore, guns, radars, the sound ranging system and sometimes the battalion mortars, were, where possible, surveyed to less than one metre accuracy with respect to the map.

The 1974 publication, Artillery Survey, states that, *“The aim of artillery survey is:*

To permit the effective engagement of targets by unobserved fire ...

To enable a number of guns of a formation to concentrate their fire ...

To help reduce the number of adjusting rounds required for observed fire.

To enable locating equipment to produce target data in the form of accurate locations of enemy weapons¹ ...”

The publication is detailing not only the reasons for needing survey, but the benefits of having that survey. Unobserved fire in Vietnam (generally Harassing and Interdiction fire), were fired in extraordinary numbers, at night, on suspected enemy locations, and were only fired when there were no friendly troops in the immediate area. Enabling a number of guns to concentrate their fire was a basic necessity, and there is no better example than the necessity to do this at Long Tan. The number of adjusting rounds may well have been reduced, but this would be difficult to determine in Vietnam; invariably, the first rounds fired by the guns of the regiment were always directed to land 1000m from own troops, and then ‘walked in’ toward our troops in increments of 400m, 200m, 100m, and 50m steps. (The opening rounds from the medium and heavy guns of the US were even further away – 1500m to 3000m.) It was fairly rare practice to ‘bracket’ the target with the opening rounds, as was the teaching in Australia. Finally, the locating devices would be next to useless if they were producing targets on one map system and the guns were operating on another map system. The chances of hitting any located targets would be minimal.

The concentration of a number of guns was a requirement from the first deployment at Nui Dat. The gun batteries and locating equipment of Australia, New Zealand and the US Army were spread over an area of perhaps three kilometres at Nui Dat. They needed to be surveyed in sympathy with one another, and, for best effect, they needed to be in sympathy with the map. The first priority was to have the guns and locating equipment in sympathy with one another, but tying them sympathy with the map was always the ultimate aim. When the guns were in sympathy with one another, the level of survey was referred to by the size of the formation – ‘Regimental Grid’, ‘Divisional Grid’, etc. When the equipment was in sympathy with the map, it was referred to as ‘Theatre Grid’.

Surveyors in Action

In months of September and October the artillery surveyors appear to have been used on all manner of tasks, with some discussion as to whether or not they were actually required in the Task Force. Obviously, the determination was that they would be required as the next mention in Det 131 Operational Report of November 1966 is a summary of all surveyors in the Nui Dat area:

“There are some 52 odd surveyors in the task force area made up as follows:

25

1/83 US Artillery. Regimental standard.

3	2/35 US Artillery. Regimental Standard.
12	1 Fd Regt Artillery. Arty Svysr.
12	131 Div Loc Bty, Arty Svysr.
Quantity	1 Topo Svy Tp. ¹

The Report also proposes that, for better coordination, Det 131 Div Loc Bty coordinate all the survey work in the province, and that all guns in the Task Force Area of Operations, including ARVN (Armed Forces of the Republic of Vietnam) guns at outposts, be placed on Theatre Grid when available. Further, as 1 Topographical Survey Troop (1 Topo Svy Tp) was primarily concerned with the production of maps, and undermanned, a team of nine surveyors from Det 131 and three surveyors from 2/35 US Arty were detached for field work with 1 Topo Svy Tp. This field troop was under the command of the 1 Div Topo Svy Unit Sergeant. This assistance to the Topo Surveyors continued through December with tasks to the north of the Task Force. The remaining surveyors provided survey to 101 Fd Bty for two deployments in December.

While the first six months were quite haphazard for the surveyors, the New Year brought plenty of work. Seven Fire Support Bases (FSB) were surveyed in the month of January, with five reaching theatre grid, while two were supplied with theatre orientation. On 26 Feb, Capt Campton flew to Long Binh on a Liaison visit to 8/25 Target Acquisition Battalion for discussions on the modus operandi of their surveyors, to discuss the differing terminology, and to establish that their standard of survey equates to that of the Det 131 surveyors. He also visited 66 Engineer Squadron (Topographical) Operations centre where he was briefed on “**pictomaps**” which were under development???

February continued to be busy with the establishment of four calibration points to the west of the Task Force area. While surveyor assistance to the Topo Survey section continued, 15 surveyors established four control points to the south of Dat Do (YS4859) in preparation for a move by 103 Bty on 15 Feb67 to FSB Arrow (YS4856). On 20 Feb, 103 Bty moved again to FSB Herring (YS4854). To survey from the old base to the new would have involved a 3500m traverse, 2000m of which was through very close country. As the battery could not fire in sympathy with other guns from this location, it was decided to accept a lesser degree of survey accuracy. This was completed by placing the battery on theatre orientation by simultaneous sun observation and then an oriented resection by theodolite was observed, from several natural features, to produce a fairly accurate location¹.

By Feb 67, survey equipment was already a problem¹. Three of seven Wild T2 Theodolites have been written off, worn out through fair wear and tear. The Tellurometers were constantly causing problems, mainly technical, and their use over relatively short distances (less than 2000m) was not recommended unless there were ideal conditions. Heliographs, a WW1 instrument with two adjustable mirrors which could focus the sun onto a distant position, proved invaluable, and an increase of two to Establishment was recommended. Finally, the AN/PRC 25 Radio was ‘of immense worth’, enabling the section commander to exercise tight control over a scheme.

Thus far, the survey schemes had been generally based on Traverse and Triangulation. Traverse was a series of measured, connected bearings and distances, with some form of inbuilt closure to ‘prove the data’ (via two or more computed answers) of the scheme. Triangulation was a series of connected triangles, measuring the angles to facilitate the solution of each successive triangle. To this point, Trilateration, measurement of the sides of the triangles to facilitate the solution of each successive triangle, had been little used due to problems with the Tellurometers. A pressing need was to establish a survey control point on the Horseshoe feature (YS4962) to provide a long base (together with Nui Dat) for future schemes.

Simple examples of these schemes are shown below - diagrams

The 1:50 000 series of maps were found to be quite accurate in detail, though some natural features and detail had been ‘dated’, while the 1:25 000 Pictomaps are good for navigation and have excellent vegetation coverage. The Pictomap is a collation of aerial photographs, with a grid superimposed in exactly the same manner as the normal Topographical map.

March was again a busy time for the surveyors. 103 Bty moved location (within the Task Force area) and was re-surveyed along with both Alpha and Bravo Radars, both of which had moved. This was followed by two schemes to the Horseshoe area. First to establish four new control points, and then “*supplied control to a further six battery centres for:*
A Bty 11 Armoured Cavalry Regt US Army,
161 Fd Bty RNZA,
A Bty, 2nd 35th Bn US Army
A Bty 1st 83rd Bn US Army, and
101 Fd Bty RAA¹.

This survey was part of Operation Portsea.

In April, the section reassembled as a complete section and proceeded to tie up loose ends; surveying the ARVN guns at Dat Do and Xuyen Moc (YS6568); establishing another calibration point some hundreds of metres north of Horseshoe, establishing a control point for Bravo radar and providing survey to 161 Bty some 5000m west of Nui Dat (**possibly FSB Weir???**)

Innovative Surveying

In all previous wars, with a ‘front line’, surveyors (and gunners generally), could move and operate behind the front line with relative safety and freedom of action. Vietnam was different. There was no front line, so any deployment outside the base of Nui Dat meant moving into the unknown, and surveyors, operating Theodolites and distance measuring equipment required protection. Less than 50% of the province was ‘open’ country where it was possible to see for

several hundred metres up to kilometres. This was ideal for surveying, except for the protection factor. To provide infantry or armoured vehicle protection was an inefficient use of resources, with the result that the surveyors were always looking for new and innovative ways to conduct survey, where protection was less of a factor.

The airborne (helicopter) schemes were one such innovation. The 'safe height', for helicopters to avoid small arms fire from the ground, was 1500 feet (just under 500m). The pilots were therefore asked to hover above identifiable features, on the ground, while the surveyors observed their helicopter's location and ceased 'tracking' on the orders of the section commander who was in the helicopter.

The first such innovative scheme was attempted on 29 April 67, where *"members provided assistance to Topo Survey section in an experimental scheme to show the feasibility of a Heli-borne satellite station for long distance survey. Due to faulty equipment, the scheme was not completed"*.¹

Although not described in the Operational Report, this was one of two possible schemes:

A helicopter hovers over the unknown point (eg a FSB) at a height where it can be observed from some distance through Theodolites. With three or more Theodolites observing the helicopter, the location could be computed by Intersection.

A more complicated scheme, whereby the helicopter hovers over four unknown but easily recognised features on the ground, and is observed by Theodolite from at least three known stations and the unknown station (the remote FSB).

At shorter distances, the helicopter could be replaced by a hydrogen balloon, tethered above the battery centre. The essential part of both of these schemes was the simultaneous observation of the helicopter or balloon by the Theodolites; this was achieved by (generally) the section commander having the survey observers 'track' the helicopter or balloon until ordered to stop, using a count-down procedure, by the section commander.

Further example and description.

Another option was a 950m tall mountain called Nui Chau Chan (YT6010) in Long Khanh Province to the north of Phuoc Tuy. On top of that mountain was a US Army signals retransmission base, with a trig point (a survey marker). Apparently, this was a very important base, providing links back to Continental USA, and had once before been attacked and over-run by the VC. The base protection when surveyors visited was a company of infantry, with massive firepower in machine guns, anti-tank weapons, claymore mines, hand grenades and searchlights. Forty-four gallon drums of Napalm were loaded onto spring loaded trip-levers, which could launch the drum over the sandbag walls, to tumble down the mountainside where they were exploded with machine gun fire.

The mountain overlooked Phuoc Tuy Province and was visible from perhaps 60% of the province. So, long as the guns and/or radar deployed in an open area, and they did this for their own self-protection, then if all other means failed, the surveyors could generally conduct a long-range scheme from Nui Chau Chan. (The fact that the US Army personnel on Nui Chau Chan had their own 'shop' and were more than willing to 'trade' uniforms, hats, cigarettes and equipment, meant that his was a popular place for the surveyors to visit – competition was fierce when it came to a trip to the mountain.) A simple closed traverse from the trig point on Nui Chau Chan, down to the battery centre, across to the edge of the FSB and back to Nui Chau Chan may have carried survey 30 000m in perhaps half an hour of observations and computations. To avoid the humidity, it was advisable to complete such a scheme in the early hours of the morning.

The original survey section was replaced in May 67 and the new section completed some shake-out schemes around the Task Force area. At the request of the CO 7RAR, several survey points were established in the battalion area to assist with the coordination of weapon pits and arcs of fire for machine guns. A Computing Centre was established in the old Regimental Command Post, allowing computations to be undertaken at night.

Where was the 'old' regimental CP??? Was it abandoned when the FSCC was up and running???

Nui Chau Chan

Dubbed 'the Friendly Mountain' by SGT Geoff Jebb, Nui Chau Chan was, for survey operations in the north of the Phuoc Tuy province, the ultimate back-stop. Rising some 800m above the surrounding flat countryside, and located about 10km inside Long Khanh province to the north, the views from Nui Chau Chan were 'forever'.

Deployed on top of Nui Chau Chan was a US Radio Relay Station, and it 'bristled with antenna of all descriptions. It was only accessible by helicopter and ... the top of the mountain had been cleared of all vegetation to about 50m down the slope. It was ringed with bunkers, razor wire, machine guns, and 44 gallon drums of napalm to form a defensive perimeter." (GJ letter to KA) Of prime importance to 131 surveyors was the French Trig Station on its summit. Given the right weather conditions, a direct line of sight into a FSB location, or location close by, was almost guaranteed; prior recon from the intended FSB location could confirm this.

The base was manned by a platoon of American infantry and about two platoons of SVN (ARVN) soldiers, commanded by a US Army Captain. "Heavy and medium mortars and 50 cal machine guns made it near impregnable." The 44 gallon drums of napalm were mounted on spring-loaded launchers similar to that used on Navy ships for launching depth charges. If required, the launcher was tripped, the 44-gallon drum rolled down the slope and was then strafed by 50 cal machine gun to explode the drum – nasty stuff, but effective.

Apart from the French Trig Station, there were some very serious benefits to be had on the base. The hospitality shown to visitors was first class, and a couple of cases of VB or Fosters "... that somehow managed to be included with the theodolites, tellurometers, batteries and heliographs", gave some balance to the equation. "Hot meals, hot showers,

accommodation; nothing was too much trouble.” In addition, there was no digging, no standing to, no machine gun picquet, no protection parties required, no dust and if the weather closed in, “... we had to endure a couple more days.” (GJ letter to KA)

Russell describes other benefits. “The base provided my first contact with marijuana which was obviously in full use as treatment for battle fatigue. I believe it was locally grown in a patch known as Ho Chi Minh's garden.” Russell also described some of the heart wrenching stories with continual reference to “... getting back to the world” with clear implication that anywhere outside the continental US was perhaps extra-terrestrial.

Chapter 10

“Duffel Bag”

The Unattended Ground Sensor Program in Phuoc Tuy Province South Vietnam

Background

While the US Forces had introduced Unattended Ground Sensors (UGS) into Vietnam as early as 1968, it was not until May 1970 when Australian Forces became involved in the program. Sergeant John Brewer was to become ‘Mr Sensors’ in Phuoc Tuy Province, implanting sensors between May 1970 and March 1971, when he completed his tour. A total of 33 ‘strings’ of three to four sensors were deployed and continually monitored until November 1971.

Sergeant Brewer was on his third overseas tour of duty. In 1963-65, Brewer served in Malaysia and Borneo; in 1968-69, he was the Survey Sergeant in Detachment 131 Div Loc Bty at Nui Dat. Having served as a signaller and an Operator Command Post Field in A Battery and 102 Field Battery, Brewer was very familiar with the call for fire routine which proved a bonus when implanting sensors in that he could also act as the Forward Observer for the implant team and security party.

As the Survey Sergeant in Headquarter Battery 4th Field Regiment, the Survey Sergeant appointment was almost without portfolio, as most of the battery surveyors were duty personnel in the Artillery Tactical Headquarters (Arty Tac), and there was no real job for the survey sergeant. So, when the Australian forces were offered UGS by the Americans, John Brewer was selected by LTCOL Brien Forward as the man for the job. Prior to this, CAPT Keith Hall, BC HQ Bty 4 Fd Regt, had attended the Sensor School at Van Kiep, Vung Tau, to assess the program with a view to Australia adopting the sensors offered by the US.

The notion of a sensor program had been under development since 1966 when Secretary of Defence Robert McNamara had been presented with an idea for a physical and electronic barrier, which would be over 216 miles long (320km), 500 yards wide, and stretching from the South China Sea, south of the DMZ, across the Laotian border to the border of Thailand. It was estimated it would take five US Divisions to erect and defend the system. The barrier would be supported by an extensive array of sensors and minefields. This particular project did not see the light of day, but the idea of a suite of sensors, capable of retrieving intelligence without loss of life, was attractive.

On 1 June 1968, the aerial portion of the program was redesignated IGLOO WHITE. Some 20 000 sensors were deployed in Laos under this program. The remainder of the program went through several name-changes, until October 1968 when the Ground Sensor Program was designated DUFFLE BAG. For 1ATF, this program was controlled by II Field Force Vietnam, at Long Binh.

The costs were enormous: development and introduction of the is estimated at \$1.7 billion, with a \$1 billion price tag per year of the five-year operation. In 1972, the ADSID (Air Droppable Seismic Intrusion Device) cost US\$619, while the Seismic/Acoustic (ACOUSID) device was \$US1452.

Structure and Training

The sensors used by 1ATF were the Phase II equipment only. Phase 1 had numerous faults, primarily in the self-destruct mechanism. The self-destruct mechanism prevented tampering after deployment, and this resulted in numerous injuries during training. Phase II was quickly introduced, with the self-destruct mechanism having been modified to destroy the crystals only. Phase III and IV were in-service, but only with the US Services; Phase IV deployment commenced in late 1969. Each Phase had an increased capacity with Phase IV having a greater number of communication channels, longer battery life and a larger sensor field.

Initial training was conducted by US Army personnel at the Van Kiep Training Centre, Vung Tau, during the period 6-10 July 1970. The course personnel comprised a CPL from G (Int), one representative from each of HQ AFV and 1ALSG, nine ex Radar Operators from Det 131 Bty and Sergeant Brewer. The training course consisted of all aspects of operating, maintaining, deploying, arming and disarming of all the sensors available to the Australians.

Also included were the various reporting procedures, including monthly reports via signal to IIFFV which reported the number of sensors deployed, number of activations and any tactical information derived. Other Reports included requests for equipment and problem solving with equipment in general. The course was conducted by four US personnel and very professionally conducted.

Each ‘string’ of sensors comprised a small number (up to four) linked to a Receiver Station. For the most part, the sensors generally had a line of sight range of 75km under ideal conditions; the exception was the Patrol Seismic Intrusion Device (PSID). Designed with numerous transmission channels, the Australians restricted their systems to just one

channel. This reduced the complexity of monitoring, with less equipment and therefore less manpower requirements. Each sensor was either pre-set, or had a capability to be set, with an individual TONE CODE. When the sensor was activated this code number was displayed on a monitor and on a graphic readout. The equipment used and operated by 1ATF was as follows:

The Equipment

Patrol Seismic Intrusion Device (PSID) The smallest equipment was the PSID. This sensor system consisted of 5 components; 4 transmitters and a receiver. Each was plastic moulded, powered by a nine-volt battery and measured about 12cm x 6cm x 3cm thick. The transmitters came with a leaf aerial, approx 50 cm, a geophone on a short cable and raised indents indicating their individual tone code from 1 to 4. The receiver was the same size as the transmitters, and all parts fitted into a six-pocket cloth bandolier which was draped around the shoulders. The seismic detection range for transmitters was about 10 m, and transmission range to receiver about 200m.

As the name suggests, the PSID was designed for patrols and so were used by the Infantry, not Det 131 personnel. They were easy to operate, easy to implant and very effective at providing early warning in ambush or night harbour positions. For an ambush, the transmitters were laid out along the approaches to both sides of an ambush in numerical sequence. The geophones were pressed into the ground with the heel of the boot and, when activated, passed their tone code, 1, 2, 3 or 4 beeps, to the small headphones on the receiver. Knowing the sequence in which they were laid the operator could tell the direction of movement. Some problems were encountered with false alarms caused by animal movement or climatic conditions, for example the wind moving tree roots. However, if the operator was receiving timely activations, in sequence, they could be sure that something or someone was coming.

Mini Seismic Intrusion Device (MINISID) The MINISID was a transmitter and geophone encased in a metal box approximately 23cm x 20cm x 15cm and weighed about 3kg. The external aerial was about 25cm. It came with a set channel but with the capacity for the operator to set any tone code he wanted. It had an inbuilt test system, arm/disarm setting knob and had an inlet for auxiliary equipment. The detection range was about 30m for personal and more than 100m for vehicles depending on ground conditions. Battery life was about 3 months and could be changed, hence the disarm capability. However, our SOP was never to recover or change batteries due to the possibility of booby trapping.

As the geophone was built in, the unit was buried then tested to ensure transmission was received, packed tightly within its hole and then armed. The sensors were laid out in strings of 3 or 4 about 30 to 50 metres apart along tracks, river crossings and places of interest. The MINISID was also the transmitter for the magnetic device (see below). The MINISID was the most used sensor; other types were deployed in the string to confirm seismic activations.

Magnetic Intrusion Device (MAGID) This device consisted of two solenoids about 40cms apart that were joined by cable to the MINISID. A special tool was used to bury them to get as neat a fit in the hole as possible. Once connected to the MINISID, the device converted to a magnetic device rather than seismic. The solenoids produced a magnetic field around the sensor; when broken by something metal passing by, it transmitted its tone code.

Air Delivered Seismic Intrusion Device (ADSID) This device was designed to be dropped out of aircraft, generally a helicopter. It was ballistically designed to drop like a bomb, point first. The aerial was made to look like a small tree. The ADSID armed itself when it hit the ground and a metal brake system between the body and the fins prevented it from burying too deeply. With 12 inert practice devices, 1ATF personnel began practice dropping with 9 Sqn RAAF.

Three track systems were selected in the Long Hai foothills for three strings of four ADSIDS. Only two of the ADSIDS produced activations. The problem could have been hitting the ground at the wrong angle, ground was too hard or perhaps rocks were encountered. Perhaps the area chosen should have been more jungle or rice paddy, where the ground was always soft? The result was that the ADSID was not used again.

Acoustic Sensor (ACOBUEY) This was a long, cylindrical sensor, which looked similar to the devices launched from PC3's to detect submarines. It was dropped by aircraft. On launch, a parachute deployed arming the sensor before entangling itself in the foliage. It was equipped with a diurnal lens which, with the cap removed, only operated during the hours of darkness. It was sound detection only and had the capability to drown out unwanted background noises. Although trained on this device, 1ATF did not adopt it as part of the package.

Mini Acoustic Sensor (.....) The Mini Acoustic was only half the size of the ACOBUEY but with the same capability and about 45cm long. It was hand emplaced. The aerial was linked to the sensor by a long cable which could be mounted in a tree. Once the sensor was activated the sound transmission was sent to the base station and recorded on audio tape. The activation range and the quality of sound varied due to the conditions, so the SOP was to place them as close as possible to the track.

This was an excellent confirmation device when placed with a string of MINISIDS. Alone, they were ideal for suspected base camps, river crossings and track junctions.

It should be noted that all of the sensors, except the PSID, incorporated an anti-tamper capability which activated when it was tilted or opened without the correct disarm code having been entered. The self-destruct device shot a piston squib through the transmitting crystals. It should also be noted that consideration was never given to the maximum activation range of any given sensor. For example, if the sensor could cover a radius of 50m, then it could have been sited say, 40m from a track and say, 30m from the next sensor. SOP was to place them as close to the track, river crossing or bunker system as possible, without compromising their concealment; that is by approaching the implant site from the jungle, not from the track.

Monitoring Equipment The receiver was called a PORTATELL. About half the size of an AN/PRC- 77 set, the Portatell had volume controls, channel selectors, audio outputs, speaker, squelch control and most importantly a tone code display; inputs to accept a tape recorder and a graphic display device were included. It was connected to an RC/292 antenna and had its own Omni directional aerial.

When a sensor was activated its tone code was displayed on the monitor. Connected to this was a graphic real time paper recorder which made a mark for that particular tone code at the specific time of activation. When the tone code appeared, the operator was looking for a sequence. The operators knew, and the Portatell knew where every single tone code was situated and where in each string. A tape recorder was connected to the monitor so that the operators could pick up and record speech, or other sounds, from the acoustic sensors.

Operations

Before 1ATF commenced Sensor operations, the TFAIO, CAPT Brian Kennedy, and SGT Brewer were able to visit the 25th and 1st US divisions to have a look at their operating procedures. Their monitoring stations were mind boggling. They were set up in demountables which had bank upon bank of computers, and monitors, capable of receiving as many channels as they wanted to use; a vast number of sensors could be deployed and managed by the dozens of staff. Their line of sight problems was solved by having a relay of EC-121R aircraft (the civilian Super Constellation) continuously in the air to act as a relay station. 1ATF system was somewhat smaller – one Monitor, one radio, one antenna, one operator (on shift), no computers, and a dug-in Command Post.

With training complete, 1ATF received its sensors and preparations were made to build a bunker on Nui Dat hill as a monitoring site. The ex-radar position across from the water tower was converted to the stores area. This position had air conditioning and a refrigerator as all batteries had to be kept cool. This was quite a popular spot, and so was restricted to essential personnel only.

Planning commenced with allocation of sensors to strings, the setting of tone codes, and testing of all equipment. The Omni directional aerial was set up on the hill and a simple communications plan initiated with Arty Tac. Meetings were held with Arty Tac and G (Int) with respect to the passage of information and Reports. It was decided that all activations would be passed to the Arty Int duty personnel and paper readouts were delivered to G (Int) every morning. ZULU target numbers were be allocated to each string or individual sensor.

These strings were placed west of Hoa Long up along the foothills of the mountain range up to about to Ap Sui Nghe, in the Long and Light Green to the crossings on the Song Rai River and the track systems at the foothills of the Long Hai's. SGT Brewer personally planted all the sensors. The protection party, more often than not, was D&E platoon commanded by Lt John Burrows. SGT Brewer reports that, 'they were a fine infantry unit who rapidly understood my requirements and their only complaint was their having to carry these heavy sensors around the province'. SGT Brewer also acted as their Forward Observer (FO).

Initially, the sensor strings were detecting movements, but no group of any size. This changed during the period 6-8 Aug 70 when a string situated just north of the **(XXXXX mountains)** picked up significant confirmed movement. D&E Platoon with SGT Brewer as their FO deployed during the hours of darkness on the 8th to set up an ambush.

During the night of the 9th one of the PSID transmitters, set up to the side of the killing ground for early warning, constantly activated for about 5 minutes. The Platoon Commander and SGT Brewer checked the area early the next morning and found that a new track had been made at right angles to the ambush site within 1 metre of the activating sensor; the ambush was moved a short distance to cover this new area. At approx 0830 on 11 Aug a large group of the enemy entered the rear of the ambush which resulted in 2 KIA, 3 WIA, 3 weapons captured and 1000 lbs of foodstuffs and equipment. This action came together barely one month after the section had completed their training in Vung Tau.

Perhaps the biggest disappointment for the operators and monitors was the lack of feedback from the Intelligence Corps who received daily the recorded conversations, and all activations for the preceding 24 hours. Presumably they had the recordings translated, and matched with the locations, but the only further action, as far as the Sensor team knew, was a brief mention of the locations in the daily Intelligence Summary (INTSUM).

Other records???

How did we get into this?

Who trialled the equipment?

Who made the decisions?

Did we buy the sensors or were they 'donated'?

The book continues next month with "Chapter 11 – "Battle of Binh Ba and Long Tan".

As the series continues, you are invited to submit your own recollections and as Kevin mentioned to me there is a bit of a lack of information as to activity in Artillery Tactical HQ (Arty Tac), so efforts of recollections there is more than welcome.

Also, please feel free to submit to me any factual errors you detect.

Paul Dickson: 131eyesandears@gmail.com



. Question Time.

This is not necessarily a typical (whatever that means) “Quiz Time” article but one with questions included, so let’s get started...

Ed - Here’s a couple of curiosity questions -

. If you extended your tour of duty in SVN, did you do it voluntarily and for how long?

. Did anyone (mainly Nashos, I guess) join the Regular Army, and if you did, how long did you stay on for?

I can understand ‘why’ for both questions –

the SVN one possibly could have been “what am I going to do back at Holsworthy etc?”,

and

the transfer to the Regulars being the uncertainty after heaps of training, “what do I do by going back to my prior job?”

National Service did throw a “spanner in the works” for a lot of us.

A Post-Vietnam adventure by John I’Anson...

Ed – Now let me set the scene for this article...

John, like others of our “lot”, communicate on a fairly ad-hoc quarterly basis and as most of you would know I tend to ask questions, so the following originated from my revisiting John’s Locator Profile and thought the following statement must have a story to it – “Immediately after discharge I went overseas and ended up in Africa for 4 years...”.

So, here’s a bit more really interesting detail of John’s (well, publishable!) post-Vietnam meanderings though Africa -

“G’day again Paul I apologise about taking so long to reply I am just back from a trip down South. Beautiful place and unlike up here the water is crystal clear because it is not spoilt by Pattaya and Bangkok. I packed my laptop and forgot my power cable, so I was disadvantaged.

About my post-Vietnam experience, well, while I was there 68/69 we had a mail problem with the Postal workers refusing to send our mail and the Wharfies refusing to load our ships bound for Vietnam. There was a big movement “PUNCH A POSTIE WHEN YOU RETURN” we did not understand why there was so much anti troop feeling we were only following orders! We were called baby killers, rapists and murderers! I can assure you it was the enemy using these tactics not us! But the Communists in the Union movement and Wharfies had convinced the demonstrators it was us. So, when I returned I felt alienated and did not feel comfortable in my own country so myself Marty Kryntjes and 2 of my non-Army mates decided to head overseas!

I returned from SVN April 69 and was discharged July 69 and departed Sept 69. We sailed from Sydney to Genoa, Italy which took a month and headed to Holland where Marty had family. We purchased a VW kombi wagon and off we went. But it started to get very cold and very expensive to live and we had heard there was plenty of work in Johannesburg, South Africa. Marty decided to remain in Europe to be with his family so 3 of us took-off.

After much investigation, we found the only affordable route was to fly from London to Nairobi, Kenya and overland 3000 miles to J’burg which took us 3 weeks. I must mention that I warned my mates not to mention SVN as I did not want the “baby-killer” shit to start.

Our trip was rather adventurous but I will not bore you with details. Anyhow, we got to Rhodesia just short of South Africa but were nearly broke, but, Rhodesia headed by Ian Smith had just defied the UK government and declared independence from them and were desperate for people, so, we were given residence and got employment there and it was a great life until the war there heated-up and one night at a party my mate, half-drunk mentioned I had served in Vietnam. Well, the reaction was unexpected and I was treated like a celebrity not a “baby-killer”. I stayed there because I loved it, but Mugabe who was a despised Communist and supported by of all people Malcom Frazer, a traitor, and in the same league as Turnbull! Just to give you some perspective 80% of the Rhodesian Army fighting against Mugabe was black, so the blacks knew what was coming under Mugabe!

I spent time in many African countries including Kenya, Tanzania, Zambia, Malawi, Mozambique, Botswana, South West Africa (Namibia) and of course South Africa. My final city of residence was Cape Town, a wonderful place, but now I am informed a gun must be carried!

What has amazed me over the years is the lives, money and equipment the US put into SVN to stop the spread of communism, but in Africa just stood by and let them have it! It was so sad to watch this happen right before your eyes! And I must mention the most impressive men I have met in my life was Ian Smith a very great man. While I was in

Rhodesia I was invited to the Victory Ball held after Smith won the general election and my life's regret was not attending mainly, because I had nothing even close to appropriate attire.

Thanks for your patience Paul in listening to my life's ravings."

Ed – John's story is a classic and I guess flows on from the "Question time" article above – "What am I doing?" - 'National Service did throw a "spanner in the works" for a lot of us.' For me it did cause a loss of direction for about 12 months, then it got straightened out after that – a different life.

AN INVESTIGATION 181 Days



. The Republic of Vietnam Campaign Medal (RVCM)

This is just a continuing update with regards to the progress being made with the submissions on behalf of Defense Force Members, who for no reasons of their own, were not awarded The Republic of Vietnam Campaign Medal (RVCM) –

Richard Barry, AOM responded to an enquiry email –

"Nothing to report

My strong advocate met with politicians in Canberra yesterday to hand deliver relevant documents. Sending same via email often sees such documents never reaching the desired politician. Plus, a face to face meeting often results in good outcomes. Waiting patiently. Trying to remain calm and to keep the faith.

Richard."

Paul Dickson

"Nothing ventured, nothing gained."



. Here's a continuing story in the series with regards to Locators' "passions" ...

Russ Jackson responded to an email with regards to my enquiring about - "the sports cars I used to race" or photos to do with your "compulsive disorder" of amassing a substantial collection of diecast models!!!

Well, here's his story and some photos ("some" only, as there are heaps of them!)

"The **diecast** collection which totalled 3,500 at its peak has pretty much been sold off with about 250 left. The remnants are currently listed for sale on eBay.

I have selected some individual photos but as you can appreciate it would be impossible, through photos, to give an accurate depiction of the full collection of 3,000 plus models.

The collection started with Ferrari models and then got completely out of hand with the end result being an eclectic mix of makes.

At its peak, I was invited to display a sample of the collection at events such as the **Ballarat Festival of Motoring** and the **International Motorclassica** in **Melbourne**. I have included a couple of photos from the promotional brochure for BFOM.



All models were kept with their original packaging and sold as such. Sales have been interesting in that a lot of the collection has gone to the States with a number going to France and UK. Up until this year sales to Russia had also been strong. Only a trickle has gone to the domestic market. eBay certainly catches a worldwide market with my sales going to places such as Chile, Qatar, Brazil, Indonesia, Thailand, Argentina amongst others.

All the models photographed have been sold and they range in scale from 1/12 through 1/18 to 1/43 scale.



In terms of my car racing I have very few photos as I was otherwise occupied and I must have been seen as unworthy of a photograph.

At right is the MGA I used to race in hill climbs, quarter mile sprints and circuit racing. This car, which I retired from racing and owned for a total of forty years, ended up being sold to a collector in Gloucester UK.





Also included is the Mini Cooper S I used in motorkhanas and sprints during the 1970's.



At this time, I also owned a Concourse award winning MGBGT which was probably one of the nicest cars I have owned.

A photo of this is included with a hairy individual breaking into the hatch.

There is no order to the photos as I have attached them as I found them. Hope they fill a bit of a hole in the archives.

Regards Russ."

...Russ added a footnote -

"As a footnote, I should add that throughout my years of model collecting and motorsport I have had a very supportive wife and family. They have accepted and supported my passion for motor cars. You might also like to add that I currently own and enjoy driving a Golf R."



Ed - What an amazing collection of fabulous "collectables" and his "Passion" for serious "fun" cars – thanks for sharing Russ.



. Kevin Browning – adds another interesting aside to Pat McGowan's Vale...

"Hi Paul,

For now, though I would like to add a little to Dave Doyle's Pat Gowan's Vale and to David Dougherty's information on Sound Ranging. However, before getting to them Jeff Schaffer's mention of the movie 'Danger Close' could be extended to ask whether the CO 6 RAR was a full colonel?

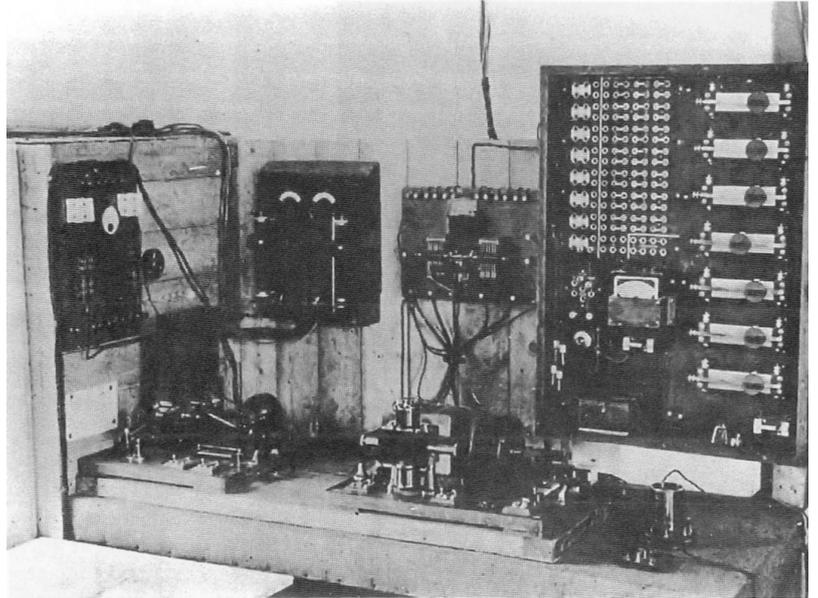
Pat Gowan's had a second association with 131. He was CO of 8 Medium Regiment at Holsworthy 72/73 I think. We were part of the Regiment, in 72 the survey section was surveying Lancelin range north of Perth and he visited us in his capacity as CO. Timing couldn't have been better, he was a real seafood lover and on the evening of his visit one of our group returned from a visit to see his brother who worked on a Lobster trawler. He had in hand a couple of sand bags full of lobster. I believe the CO was impressed with the work we did. Like Dave I found him to be a good person to work with. The attached is some more information to add to onto David Dougherty's article in the last month's *Eyes & Ears*. It is the story of Sound Ranging written by Sir Lawrence Bragg, also a photo of the WW1 equipment.

The Sound ranging sections of WW1 remind me of the 131 Nasho's, well most of them, pretty bright blokes. Anyone interested in more on Sound ranging or for that matter the Locating world of WW1 I recommend Artillery's Astrologers by Peter Chasseaud. It is an in depth look at Survey and other trades associated with artillery intelligence but not an easy

read. That is you need to read the whole book to get the full picture as it is written in chronological order. Also, not a cheap book but local library should be able to get copy.
Regards, Kevin."

Sound Ranging in France 1914-1918 by Sir Lawrence Bragg

It is very tempting to reminisce about people and incidents in such an account as this, because memories of them are so vivid and interesting to those of us who served in the First World War, but I think this temptation must be sternly resisted, because they cannot have the same interest for a later generation. I shall instead concentrate on the technical development of sound ranging. It must be hard for those who only know World War 11 to realize how little science of any kind was involved in World War I. The therm ionic valve had been invented, and its use for radio communication was just starting; in addition, it was used in trench listening sets to pick up enemy messages sent over a circuit with an earth return. Meteorological conditions were forecast. Survey and mapping had already established their expert position. But apart from this I cannot recall any organisation in the Army which specifically enlisted scientists in its



service. When I was seeking recruits for sound ranging, I had only to ask for a parade at the depot and say "Bachelors of science, one step forward" to get a generous response of eager aspirants to some job in which their knowledge could be used. There was an almost impassable barrier between the military and the scientific minds. The military thought us scientists far too visionary and gadgety to be of any help in the field; the scientists could not understand why their brain waves, which seemed to them such war-winners, made no appeal to the military mind.

It was into this rather unfriendly world that British sound ranging was born. It had been started in both the French and the German Armies. The principle is simple. A series of listening posts or microphones are situated in known positions along a base behind the front line. The time differences between the arrival of the report at the posts are measured. Suppose the sound to reach post 1 first at time T_1 post 2 at time T_2 and so forth. Then, if one draws a circle on the map around post T_2 with radius $V(T_2 - T_1)$, when V is the velocity of sound, and similar circles for the other posts, a great circle which passes through T_1 , and touches the other circles represents the form of the report wave, with the gun at its centre.

The French experiments were viewed with great interest by some of our Sappers, Colonel Winterbotham in particular, and he pressed for a similar organisation in the British Army. The Gunners would have nothing to do with it, but Winterbotham was a persistent man. I saw the files after the war, when I was writing a sound ranging manual, and one letter said in so many words that the R.A. could see no possible advantage in sound ranging but that, if an officer were detailed to experiment with it who was of no use for anything else, they supposed there was no harm in giving it a try. As a result, 2nd Lieutenant W. L. Bragg was summoned to the presence of Colonel Hedley in M IS, and told that he was to proceed to France, collect a sound-ranging outfit in Paris, and experiment with it at the front. I was at that time in a Territorial Horse Artillery battery, very much out of my element, as my knowledge of horses was not at all extensive, and my fellow officers and men were Leicestershire hunting enthusiasts. Returning from my interview down Whitehall, I realized what is meant by "walking on air", having a scientific job in the war thrilled me so greatly.

The French had tried several systems. In the simplest, the arrival of the sound was registered by observers who pressed keys. There is always, of course, a small lag of about $1/5$ th to $1/10$ th second in the response to the sound. An attempt was made to assess the typical delay for each observer, so as to allow for it. This system has the advantages of great simplicity and also that of discrimination by the observer, who only pressed his key for the gun report and ignored other sounds. It was a possible though approximate method when guns were very close to the observer. It broke down completely for guns at longer ranges because the determination of position was meaningless with such large errors in timing. (374 Annex L 375) In the method which was finally adopted as standard by the French Army, currents from the microphones at the posts actuated "pens", whose movements were recorded on smoked paper at the headquarters behind the base, to which the microphones were connected.

Yet a third system employed a recorder which had been designed by Lucien Bull, of the Institut Marey in Paris. This was the most elegant and accurate of the recorders, but it was complex and required photographic development. Bull employed a six-string Einthoven galvanometer, in which the currents were recorded by the displacement of fine wires in a strong magnetic field. The wires were strongly illuminated and their shadows were thrown by six small totally reflecting prisms, into juxtaposition across a slit. A cine film ran behind the slit and a toothed time wheel governed by a tuning fork interrupted the light 100 times a second, so ruling time markings across the film. The apparatus was switched on and off by one or more forward observers in front of the base, who heard the sound before it reached the microphones. When the apparatus ceased running, the operator at headquarters cut off the portion of film which had run, developed and fixed it, and passed it to the reader who measured the time intervals and deduced the position of the gun.

Lucien Bull has kindly given me an account of the way in which he and Charles Nordmann, of the Paris Observatory, started their experiments on sound ranging together. It is so interesting that I must quote it in full:

"In the middle of October 1914, I was working at the Marey Institute, on Electro-cardiography and recording heart-sounds, when a knock came at the door of my laboratory. "Come in", and appeared a non-commissioned officer (brigadier) in full uniform. Introduced himself as Charles Nordmann, astronomer at the Paris Observatory called up for military service in the artillery. Asked me, with a more or less air of mystery, if I could give him some information concerning the registration of "faint" sounds of low frequency?" Replied I thought I could, guessing without the slightest difficulty the sounds he meant. On my saying so, he abandoned his mysterious airs and exposed his whole object.

He had conceived, as a mathematician, the idea that it should be possible to locate on the front the position of the enemy's guns by measuring the time-interval between the arrival of the sound at different points of a measured base. He was lucky enough to have had his immediate superiors sufficiently intelligent to allow him to make some experiments! These were made with three human observers with well-regulated stop watches who noted the time they heard the sound of the detonation. His crude experiments, in spite of their lack of precision, showed the possibility of doing better and Nordmann obtained permission to return to Paris and work out his idea.

Having no personal knowledge of how this could be done, he went to the Sorbonne to inquire and met Professor Dastre, Professor of Physiology, who knew me well and my work on registering heart beats, and who directed him to the Marey Institute. That is how, by mere chance, Nordmann and I met and commenced work together.

I proposed at once the use of the Einthoven string galvanometer and our first experiments were carried out with our big physiological instrument weighing over 150 lb. Thanks to our clever mechanic G. Kelsen, without whose remarkable skill I don't know if we could have ever completed so well, and certainly never so rapidly, our instrumentation. He managed to lodge, in the narrow magnetic field of our huge instrument, three strings instead of one. This enabled us to record the signals from three microphones placed a kilometer apart on our experimental base. With these we succeeded, in the middle of November, in demonstrating the excellence of the method before a jury of French generals, by locating the position of a gun fired in the woods of St. Cloud, 4 or 5 kilometers away, with an error of only 5 metres in azimuth and 25 meters "en portee" (don't know the English term for this). This convinced the military authorities and we received the order to construct three sets of apparatuses for use on the front.

And this set me working for a portable set, constructing a small galvanometer for 5 (later 6) strings, a device for bringing the enlarged and consequently widely separated images (a prism bench) on to a 35mm film and a timing device (phonic wheel). All this was completed towards the middle of December and, in the beginning of February 1915, the first set came into service on the French front.

There is one date that I don't remember, that is when Captain Leroy was sent over to France by the War Office to investigate on the front the different methods of sound ranging used by the French; as you know there were at least three: the T.M. (Telegraphic militaire) system with mechanical recording pens, the Cotton-Weiss method, photographic like ours".

I am also not sure of the precise time when Leroy investigated the methods, but it probably was in the summer of 1915. It was in October of that year that I went to Paris to take over the Bull equipment, which had been housed in a specially built lorry by our transport depot.

The Bull system was chosen for the British experiments, and it was very fortunate that this choice was made, though I am not sure that its potential advantages were all appreciated at the time. As the war went on, and the ranges at which guns fired became increasingly great, the timing had to be very (376 *The Royal Artillery 1914-18*) accurate indeed if the results were to be significant. The arrival of the report had to be recorded with an error less than 1/100th second. The Bull recorder amply met this demand. Indeed, at a later stage of the war, it was used to record the time interval between the passage of a shell through two screens about 100 ft apart, and so to calibrate guns, by speeding up the film. The simpler fool-proof systems, of some service in the first stages of the war, were incapable of an improvement which would meet this demand for accuracy. A prejudice against the Bull system, because it involved photographic equipment, showed a false sense of values. The importance of locating an enemy battery infinitely outweighed the bother of a dark-room and its equipment.

So, in the autumn of 1915, I was ordered to report to Colonel Jack, head of Maps General Headquarters, which was then at St. Omer, with a view to my starting sound ranging at the front with the Bull equipment. I was to find a fellow-officer in England who had a scientific training to accompany me, and the choice fell on H. Robinson, afterwards Professor of Physics in London University and its Vice-Chancellor. He was also serving in a battery in England.

We went first to the Vosges where a Bull section was installed in a ski-lodge, under a Captain Schultz. He was to instruct us in running the apparatus. It was so quiet a sector of the front that, if I remember rightly, not a single enemy battery fired during our fortnight's training. A French battery near us, with whose officers we messed, used to spread its washing on the gun emplacements, hastily taking it in if there was a rumour of an enemy plane. Then, when we returned to General Headquarters, Robinson remained at St. Omer to arrange about the siting of the experimental section, while I went to Paris to collect the set. We set up our gear with a headquarters at a village called La Clytte just south of Ypres (it was moved later to Kemmel Hill). The section consisted of Robinson and myself, the driver and mate of the lorry who also operated the set, the two drivers of two small Singer cars for our personal use, one linesman and one N.C.O. It was a very small show compared to the establishment of 50 or so which sections were subsequently allotted. Neither Robinson or I had any experience at the front, and our only official contact was Colonel Jack at General Headquarters. We were two "innocents abroad" with a vengeance.

All the first sound ranging systems suffered from a defect which made them useless for placing guns, though they could, under ideal conditions, place howitzers. The microphones were sensitive to high-frequency noises, and quite insensitive to low-frequency noises, which is just wrong for gun recording. The Bull system used carbon granule microphones of the

"Paris-Rome" type. They were excellent at recording traffic noises, rifle fire, people talking near them, dogs barking and, in fact, everything but the muffled low "boom" of a gun going off. In particular, they were very sensitive to the "shell-wave" made by a gun with a muzzle velocity greater than the velocity of sound. When a high-velocity gun is firing towards an observer, he hears a very loud crack coming from a point in mid-trajectory, followed by a far fainter boom, which is the true gun report. It is, of course, the latter which must be recorded in order to calculate the position of the gun. The microphones were so disturbed by the shell wave that they failed to give any record of the gun report.

The French tried to get around this difficulty in a typically ingenious way. They constructed curves of the forms assumed by the shell wave for each type of gun, such as the 88mm field gun firing at a series of ranges. One tried to find a shell-wave which fitted the observation. But this did not really work. Not only did every type of gun require a different set of curves, but also, they varied with range and direction of fire. It was all too complicated. For the first year, from October 1915 onwards, sound ranging was really a wash-out, though we tried to pretend it was not. Clearly, we had to find a selective microphone which responded to the right kind of noise if sound ranging were to be any good.

The solution came in stages. First, it was clear in a number of ways that, although the gun report produced very little impression on the ear, it was associated with large pressure changes. It rattled windows. In our billet at La Clytte, of the usual Belgian farmhouse type, the lavatory opened out of the kitchen and, as all windows were hermetically closed, one sat on the only aperture to the outer air. The deafening shell-wave of a six-inch gun which fired over us left one's posture undisturbed, whereas the faint gun report had a marked lifting effect. A phenomenon which led nearer to the solution was our noting in winter, in the tarred-paper hut in which we were quartered, the jet of bitterly cold air which came through each of the many rents in the wall when a gun report arrived.

The final touch was added by Tucker. Corporal Tucker came to our section on Kemmel Hill from a post in the Physics Department of Imperial College. He had been making experiments on the cooling of very fine hot platinum wires, known as Wollaston wires, by air currents. Somehow, we arrived at the brilliant idea of using the jet of air coming through an aperture in the wall of an (*Annex L 357*) enclosure to cool a Wollaston wire, heated by an electrical current, and so to alter its resistance. What we hoped was that high frequency sounds, with their very rapid oscillations, would not drag away the film of warm air round the wire, but that the slow but large air movement, due to low frequency sounds, would do so. We got some fine wire from England, placed it across a hole we drilled in an ammunition box, and made it one arm of a Wheat Stone Bridge which we balanced, with our galvanometer in the usual circuit. I remember vividly the night we rigged it up. A German field battery obligingly fired towards us, and when the film was developed there was a small sharp "break" for the shell wave, followed by a quite characteristic and definite large break made by the gun report, which could be read with accuracy. It was a wonderful moment, the answer to prayer. It converted sound ranging from a very doubtful proposition to a powerful practical method.

The passage of air into or out of the container cooled the wire. Hence the displacement of the galvanometer string was always in the one direction, as if the lower sections of a sine wave had been reversed upwards. The characteristic frequency of a field gun report was about 25, that of a large piece about 10, though this was only a rough guide to calibre. The great advantage of sound ranging was that it recorded shell-bursts as well, so that one could determine the type of gun or howitzer from the time of flight or by recovering fuses from the shell holes. A typical report gave the calibre, number of guns, and target on which the battery had registered.

The Tucker microphone satisfied another condition which was important, in that the record it gave was a faithful transcript of the actual pressure variations. This faithfulness enabled the reader to become expert in recognising sounds of various kinds. We were fortunate in choosing an ammunition box as a vessel, because it was heavily damped and so did not impose its own characteristics. Later, when the microphones were made in England, a tidy-minded instrument designer supplied metal containers, but these were far inferior because they were resonant and imposed their own character on all the sounds.

It was a tricky business keeping the Wheatstone Bridges in balance. The current was fed to the microphones from the headquarters battery, and any variations of resistance of the lines disturbed the balance. They had to be of good quality and hence batteries and infantry found it hard to resist the temptation of pinching sections of attractive cable which apparently led nowhere. Lines on posts were obvious loot. Buried lines were run over by transport and tanks and developed leaks to earth. Line maintenance was a great problem.

A special difficulty which had to be overcome with the Tucker microphone was interference by wind. It is not the noise of the wind but the fluctuations in pressure, due to turbulence, which causes the trouble. Putting a solid wall around the microphone to shelter it from the wind current only makes matters worse, because the wall increases the turbulence. We found that anything in the nature of a thick hedge, or of multiple sheets of camouflage netting, was the answer. The gusty wind stream is converted into a steady flow, an effect like that of holding a piece of gauze across a tap. After the war Hemming and I had an opportunity to study the German reports on British apparatus which had been captured. It was interesting to see that they could not understand how we avoided the wind trouble, which seems to have defeated them completely when they tried out our method. In the Second World War, this same device was useful to the Observer Corps. They listened for enemy aeroplanes from the tops of towers, and found the buffeting by turbulent wind very baffling. A horizontal shelf projecting about six feet round the top of the tower, made of something like hopnetting, much reduced the disturbance.

Two inventions greatly increased the efficiency of sound ranging. The first was originally proposed, I think, by Lloyd Owen at Armentieres. I confess I thought it an over-elaboration at first and quite failed to see its usefulness. He proposed putting the microphones at exactly equal distances in a straight line. The consequence is that the six "breaks" on the film due to any one sound fall on a smooth curve and, with experience, it is easy to spot a set of breaks which belong together, even when there are many noises. One can also see at a glance roughly where the gun is, and neglect the sets of breaks due to our own batteries or to anti-aircraft fire. It enabled location to be made when quite a strafe was going on. The

straight base was later abandoned for an arc of a circle, with its centre roughly in the most interesting area behind the enemy lines. Plotting boards were printed for a few standard-sets of radii and distances between microphones, and it was always possible to shuffle a standard layout so that the six microphones fell in convenient places. The surveyors fixed three places correct to a metre.

The next great scheme was the "wind-section". In this J. A. Gray made a main contribution. Wind and temperature corrections were always troublesome if one tried to deduce them from meteor data, (378 *The Royal Artillery 1914-18*) because both varied so much with height and local contours. On the other hand, upper winds and temperatures were much the same along the whole front. The "wind section" was a sound ranging section behind the lines which recorded reports from a known position. A pound or so of explosive was set off at intervals of a few hours, and the sound was recorded by a series of microphones in two or three areas, at about the same range as enemy guns. Since the position of the explosion was known, one could measure the extent to which the wind and temperature had affected the readings, and so circulate to the sound ranging sections the required corrections.

All those schemes were developed at the front, and I think this was the main reason why sound ranging got going so quickly, after the first wasted year when we lacked an effective microphone. Each section (there were, if I remember rightly, about 40 in all) had a mechanic with a kit of tools, a watchmaker's lathe, and a chest of assorted bits and pieces of wood and metal, so each could tryout its own schemes. At intervals of two months or so, we had a meeting at some central point such as Doullens, to which each section sent an expert. They swapped stories, schemes, and boasts of their achievements and I am sure emulation made everything go much faster. The meeting generally ended with a binge of heroic magnitude. If the experiments had been done in England with (a) the inevitable lessening of a sense of urgency (b) less touch with the actual problems and (c) delay in communicating and testing ideas, sound ranging would have taken two or three times as long to develop. An experimental section was later established on Salisbury Plain and did very good work, but by this time the problems were well defined.

An interesting side issue of the Bull recorder was its use for calibrating our field guns, a tribute to its extreme accuracy. Bob Chapman was responsible for setting it up. It was thus possible to record with sufficient accuracy the time between breaking wires on screens through which the shell was fired. Chapman had a special section on the coast near Dunkirk where the field guns fired out to sea.

Towards the end of the war, we had an apparatus (horribly messy) which developed and fixed the film as it issued from the camera. I doubt if it was really worthwhile, as it easily went wrong and one lost precious records. By using strong solutions, the developing and fixing were done in a matter of seconds. It is true that the photographic recording was a complex process but, if one bears in mind the great value of a location (something for which an aeroplane was commonly risked), this fuss about the photography is seen to be utterly meaningless.

The Germans had a great respect for our sound ranging. It was a great day when a captured German order was circulated to the sound ranging section which read:

"All Field Survey Companies.

The following extract from a German Order is forwarded for your information: -

Group Orda. "In consequence of an excellent sound ranging of the English, I forbid any battery to fire alone when the whole section is quiet, especially in east wind. Should there be occasion to fire, the adjoining battery must always be called on, either directly or through the Group, to fire a few rounds".

Maps, G.H.Q. 23 June 1917. E.M.J Lieutenant-Colonel, General Staff.

We were particularly pleased because, with our Tucker microphones and regular bases, we could record almost any number of guns firing at once, the more the merrier. It is interesting that the scientific Germans never developed a refined method. Right towards the end of the war they had a system which depended on the binaural effect. An observer had two horns at the end of a rod, each connected to an ear and, by estimating the direction of the sound with reference to direction posts, he deduced its bearing. Intersections from three or more stations gave a location. I cannot believe they were of any value. I think they were committed too early to a simpler but crude system, and it was too late to change it when ranges increased and greater accuracy was essential. We were extremely fortunate in having started with the Bull recorder.

The one thing which was never developed was the "radio link". It would hardly have been possible to develop it in World War I when radio was so very crude. I find it extraordinary, however, that it was never established in the years between the two World Wars, when it was such an obvious goal. In fact, when World War 11 threatened and I was asked to give my view on the sound ranging apparatus as it had been developed in the interim, I was appalled. It was like the World War I set which had grown the most complex whiskers. I much doubted the usefulness of most of the gadgets, possibly because I was so keen on the "stripped down" unit we were using at the end of World War (*Annex L 379 I*). I regret greatly now that I was tactless in expressing my doubts; I would have made my influence felt far more usefully if I had been wiser, and not put up so many backs. But, as the war progressed, the frills mostly disappeared and the set came back to very much the one we had been using in World War I. It was fascinating to see that sound ranging was once more of great use. Much doubt had been expressed on this point because it was thought it would take too long to survey and install a base, and so sound ranging would never get into action in a war of movement. This, however, was a wrong assessment. When there is a hold up of any kind, guns must be got into position and surveyed, and sound ranging can be installed as quickly as can the batteries. We had reports that sound ranging was often the only way, particularly in country where maps were inadequate, of getting information about enemy batteries.

The great drawback of sound ranging is that it fails when the wind is blowing away from our lines towards the enemy lines. In these conditions, not only is the sound faint but also it has an irregular beginning. One does not know what point to read on the film. The wind gradient is responsible for this effect. Since the wind velocity is less nearer the ground, the sound is refracted upwards. On the other hand, with the wind blowing towards the base, the sound is crisp and its time of

arrival can be read to 1/100th second. Unfortunately, on the Western front the prevailing wind was westerly, and sound ranging sections were often cursed for their ineffectiveness when it was really as impossible to work as it is to use visual observation in a thick mist. On the other hand, in easterly winds, and particularly in foggy weather when wind was light and temperature uniform, sound ranging worked perfectly.

Whether it will ever be used again is hard to guess when so much is uncertain. The story of sound ranging in World War I is perhaps of special interest, however, as an example of the very rapid development of a scientific technique right in the front line."

. Steve Wynn – “

Hi mate,

I did the wrong thing and went to the doctor for a prescription, he wanted to remove some skin cancers and melanomas, I said NO, but agreed to see a specialist. That was a bad move, I had over 14 damn needles in 4 surgeries to remove cancers and countless burnt off on my face and body, I am still recovering from it all.

I have another big cancer on my face that has to be operated on the day before the next 131 meeting, there is no way I will be up to the meeting mate, so could you please offer my apology. If by some miracle, I can attend, I will see you then. If one stays away from doctors, one doesn't have any problems.

Stay safe, Steve Wynn."

...Steve, then responded to some more of my ramblings -

"G'day mate,

Thanks Paul, I was going to send to Grahame too but couldn't remember his email address.

I wish I had seen this specialist years ago, I would not have gone through as much carving up. He uses a scraper then some type of laser, when he can, ouch the laser hurts, it is like it is drilling down to the bone, but almost no bleeding. He did 4 with a scalpel, but it is the burnt off ones that hurt most.

Just got back from giving (nearly) all my blood to the pathology nurse, for the annual oldies run of tests, I asked if I could have a month off after giving her 5 bottles of my precious blood, she said "yes sure, but your wife won't believe you". She was right, I have tried that on too many times before and my wife always answers "rubbish".

Well true to form I was told "rubbish" this morning when I tried it on again. I also asked the nurse to leave some for me, to which she replied "just enough to get you home", not funny Jan. Amazingly, I don't remember deserving Karma for past sins, called selective memory syndrome ha, ha.

I still have a very large melanoma behind my left knee that requires major surgery and a skin graft but I am not letting anyone near that one. The next one (I hope it is the last) is just under my right eye and needs to be cut out for some reason. I told them not to disfigure my good looks, yeah.

Stay safe and Covid/monkey pox free. Wonder what will be next.

Steve."

Ed – I shouldn't smile, but Steve does write some classic stuff, however, no doubt painful for him! Keep ahead of it Steve you've become a mate to communicate and ZOOM with. Paul.

A Notice...DVA – Ian Finlay forwarded the following...



e-news



<https://mailchi.mp/28b35db72780/dva-e-newsfor-jul-aug2020-218704?e=f60b251e4b>

G`day Dicko,

I am forwarding this News Letter (July-Aug 2022) from DVA in the hope that you will include it in your next edition of *Eyes and Ears* and advise our members to subscribe to this monthly e-news from DVA to inform our members on the services that they can obtain through DVA Services for themselves, wives and partners.

Many are not aware of the Services that can they obtain through DVA and the News Letter is Free to all Veterans, I, myself, use some of these services and are completely satisfied with the service I receive, and are more than happy with their services that they provide.

Best Regards

Ian Finlay (Fin)

Ed – it's a very informative read and worth subscribing to.

. **Ian Campbell** responded to an email from me (**Ed**) enquiring about 'activities' on a recent meander up to Port Douglas...



"Hi, Did a couple of scuba dives and a truck load of snorkelling off this small dive boat. And by small, I mean not the humongous one, Quicksilver, that takes several hundred passengers. I used to scuba dive decades back so really look forward to our Port Douglas trips. Also, sipping a few beers on the deck at The Services Club (incorporates the local RSL) now known as 'The Tin Shed', is a wonderful experience watching the dive boats and day tourist cruisers returning to port. Regards, Ian."



Mail Out



I started this in September, 2017 and have decided to continue running down the alphabet of names and sending some emails to blokes in general to say g'day and just to generally keep in touch. A lot of the blokes I've never met, so it's just to keep some connection alive. Plus, it's good to keep in touch, even sporadically, it may help to avoid any unpleasant unforeseen surprises.



Mail In - Here are the responses...

. **Michael Quinlan** – "Hi Paul.

Thanks for your update, very similar to our own.

A little new input surrounded my reading in April's edition of VVA of a parasitic worm *Strongyloides* - click on link to read the article. <http://www.vvaa.org.au/index.htm>

I went to my doc in May and he was reluctant to give me a blood test, however I insisted. The results came back three days later that I was indeed a host to these nasty little creatures for the past 53 years. I took the course of pills and will be tested again in November. I have a feeling that they have affected my eyes and lungs. I am undergoing tests by specialists to confirm my fears, will keep you posted. Apart from throwing the manacles of COVID with plenty of shows, dining out and small trips within Aus something prior to 2020 we took for granted!! That's about all for now. Regards, Michael."

. **John Richmond** – "Hi Paul.

Thanks for Your message.

At least things are starting to get a bit warmer. Canberra is expected to hit 19c by this weekend. However, we will still be getting a few cool mornings (ie below 0 c)



As to the rain that has hit most of the east coast, we were lucky only 150 mm last month, a lot better than a lot than the rest East Coast

I have just noted that there is now a new organisation around. NASHO Fair Go. It would seem their main objective seems to be obtain the Gold card for us nashos who were lucky enough not to have gone over to Vietnam. I did a quick check of their website, seem to have over 2,000 members. Question? Have you or someone (knowing your network) heard of this crew?

For me it would seem a bit late for me. Still have to be -

- . monitored for the quad a bi heart pass (2004). I contend that I am one of the few auditors that can prove I have a heart.
- . continuing treatment for prostate cancer (this is picked up by Medibank (since 2014)
- . plus, other issues

All the best, JR.”

. **John Vitkovsky** – “G'day Digger,

Have been in our new home in Victor Harbor for 3 weeks. Dealing with 25 years' accumulation of junk and necessary tools and implements left over from the Resort has been a nightmare. Pretty well sorted and settled in now. 10Kw solar system installed. A delight to cruise down to the main drag to pubs and restaurants in less than 5 minutes. It was a 150km round trip from the Resort to nearest Chinese restaurant.

Otherwise, all well. Just received the ongoing good news that my PSA rating is “not detectable”. So, reckon my surgeon, and radiologists did an outstanding job on the prostate. Will check out local RSLs in the next couple of weeks.

Pic of my shed with shelving racks installed to cope with all my tools and junk, just completed.

Regards, John Vitkovsky.”



. **Peter Meaney** – “Hi Paul,

Thought I would forward this photo taken in Brisbane recently.

L to R - **Peter Meaney** (Adelaide), **Peter Ravelje** (Sandstone Point, Bribie Is), **David Dodd** (Brisbane), **Peter Bremner** (Moffatt Beach, Caloundra).

A great coffee catch up, followed by lunch at nearby Thai restaurant.

Main topics of conversation: Men's Health and Covid, with a pinch of reminiscing about time spent in the Armed Forces.

Always good to catch up in person with these solid citizens.

Regards,

Peter Meaney ('69/70 mob)”



. **Peter Dealy** – “Hello Paul

Hope you and family are well. Finally put a bit of a reply together.

All good this end with our family. Health is everything. Even the double knee replacement I had back in July 2021 has done the right thing and allowed me to carry out most jobs including Lawn Bowls without the need for a Bowling Arm. Both of us got the Covid but fortunately very light symptoms. A week of isolation and it was all over red rover.

As you probably know weather conditions on the eastern side of Australia have been cooler than normal with a lot of rain in many places. Ann and I ventured North in the caravan for nearly 3 months. Kurumba on the Gulf via Bourke, Mt Isa and Cloncurry, then cut across to Atherton Tablelands, up to Cooktown, back down to Charters Towers, further south to Emerald and across to Bribie Island. Once we started heading toward the East Coast the temperatures dropped and Queenslanders were not appreciating the cooler weather. Home to Numurkah via Stanthorpe, Tenterfield, Dubbo etc. Avoided the flood areas – poor buggers. The country just about everywhere we travelled was in great shape.

All going well there will be Millions of tons of Canola stripped this year. A sea of yellow in many areas. Hope the prediction of a wetter late spring and summer do not come to pass as it will kill what should be the excellent return that farmers deserve for their work.

As part of my duties as President of the Goulburn Valley VVAA, arrived home to help put in place final organisation of our Vietnam Veterans Day at Shepparton with Ron Mason as an able assistant. Had a very good day with a good crowd of locals being joined by members of 7 RAR 1st Tour who had arranged a Reunion at Shepparton to coincide with August 18th. The rain held off until the last few minutes and we all quickly moved to the Shepparton RSL for excellent tucker and fellowship.

My time now back home is being taken up with planning of the local institution – the Numurkah Show, which, after a year off for obvious reasons, will be held for the 133rd time.

It is ironic that in your last email you stated "the Queen made the 70th Jubilee!". And here we are mourning her passing. She carried out her duties to the last and you cannot but admire her dedication regardless of ones' thoughts on Royalty. God Save the King.

All the best to all Vets out there. Keep an eye out for each other.

Peter Dealy."

From the Advocate's Desk...



Our professional Advocate's contact details: -

Peter Piro JP - email contact: piorowp@ozemail.com.au

Ken Foster OAM JP - email contact: khfoster1@bigpond.com

Disclaimer: Please note that all correspondence submitted will be treated with the total confidentiality between the sender and our Advocates. Printed submissions and responses that may be published in *Eyes & Ears* will be completely anonymous, just used as examples of help.

Notice Board – see what's coming up and going on...?

There's plenty of room for notices – has anyone got or getting any events planned?
Just send an email and I'll post it. Ed

Welcome Home Parade – 3rd October, 1987

The Prime Minister, Bob Hawke, stood alongside others outside the Sydney Town Hall as more than 20,000 Australian veterans paraded by, some wearing medals, berets and fatigues from war days.

Some veterans were in wheel chairs, others hobbled by on crutches helped by comrades as the crowd estimated at about 100,000 threw confetti, waved flags, whistled, cheered and applauded.

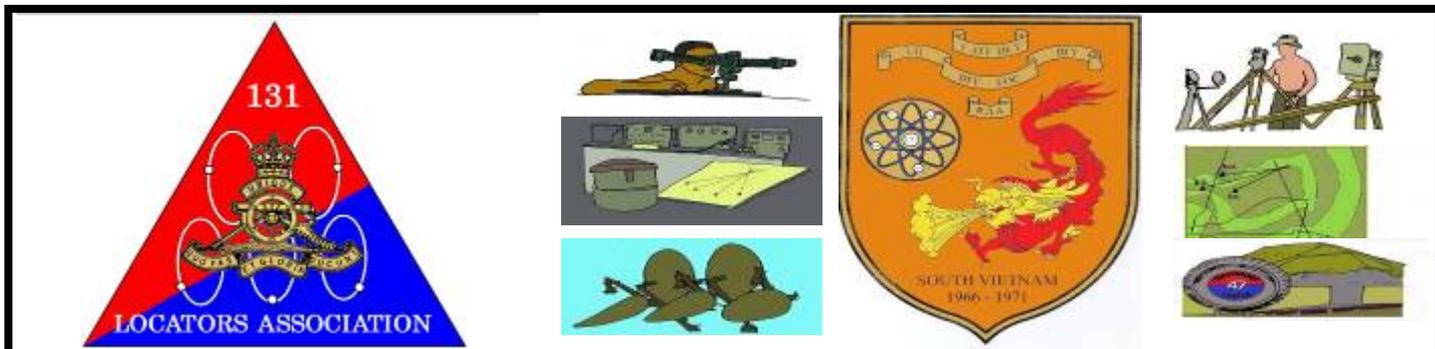


Those who participated will never forget that day.

Those amongst them who are no longer with us will never be forgotten either.

Let's celebrate, next month, the 35th Anniversary of that remarkable day and our mates.

Send in a memory of that day to Paul Dickson – 131eyesandears@gmail.com



Committee members:

President – Allen Morley, Vice President – Bert Blink, Treasurer/Secretary – Grahame Dignam,
 Webmaster – Bob Billiards, Research Officer – Ernie Newbold, Designs and Development Officer – Nick Proskurin,
 Eyes & Ears Editor – Paul Dickson

General members – Ian Amos, Ged Carroll, George Lane.

Regional Representatives: ACT – Bert Blink, Qld – Terry Erbs, SA - Geoff Blackwell,
 Vic – Alan Adams, Vic Nth – Ron Mason, WA - Barry Guzder

<http://www.131locators.org.au>



**The 131 Locators Association
 welcomes King Charles III
 as King of Australia**



**... may he continue on his Mother's
 magnificent role.**

God Save The King

Presidential perambulations

September has been an atypical month. Things changing locally, nationally and internationally.

At the local level the reports of another artillery soldier passing seem to have been too frequent. It is probably just an age thing, however, when a familiar name pops up it usually comes as somewhat of a shock.

The passing of Queen Elizabeth 11 at age 96 was a surprise to many. The idea that she would last as long as her mother was probably the reason for the collective surprise. Because the Queen was the Captain-General of Royal Australian Artillery* it meant there was a link with all who served, even if it was just for two years National Service. The Brits certainly put on an outstanding display to honour the Queen.

More rain along the East Coast of Australia reminds us how much has fallen this year. Sydney is approaching a historically high total although there are still three months remaining of the year.

From a dry continent, we are now experiencing moisture retention this makes flooding more common.

And the Covid crisis has abated. So, we are seeing the return of major and minor public events that were not possible under government restrictions. Now throw in the timing of a Thursday national public holiday as a day of mourning for Queen Elizabeth which shows the lack of experience of decision makers on the impact that would have upon small businesses.

Let's hope that the month of October will throw us fewer surprises and unexpected outcomes.

Regards

Allen

. An additional note - On 19 September 1962, Her Majesty Queen Elizabeth II granted the Royal Australian Artillery the title of the Royal Regiment of Australian Artillery. All Australian gunners are considered members of the Royal Regiment of Artillery.

Upon the Royal Australian Artillery being granted the title 'Royal Regiment', Queen Elizabeth II also assumed the title of Captain General of the Royal Regiment of Australian Artillery.

The corps motto is 'Quo fas et gloria ducunt', which is Latin for 'Where right and glory lead'.



<https://www.facebook.com/groups/131divlocbtyraa>

ZOOM MEETING: Date: Tuesday, 13^h September, 2022 at 1105hrs...

. **Pertinent Points** – extracted from the 131 Locators Association Committee meeting...

Attendees were:

Grahame Dignam, Ian Campbell, Terry Erbs

Bert Blink, Allen Morley, Rieny Nieuwenhof

Ian Amos, Bob Billiards, Gordon Malcolm

Ernie Newbold, Warwick Brooker



Apologies: Nick Proskurin, Ron Mason, Ged Carroll, Kevin Browning, Steve Wynn, George Lane, other State Reps, Jim Fitzgerald and Paul Dickson

Financial Membership is currently ...**133**, plus Associates **2**, Affiliates **16**. Total **151**. Lapsed **32** members as at 1.9.22

Presidents report.

- Allen -
- . Advised that he had written to the Minister for Vet Affairs supporting the granting of the Vietnam Campaign Medal to the wider cohort of SVN veterans.
- . The LSTAA banner is nearer to creation with the Holsters and poles being the new focus.
- . Nick Proskurin was approached to provide vector graphics to assist the production stage.
- . Joe Kaplun has advised that a Xmas Do would be held at the Panania RSL & Sporting club in early November - the date to be advised.
- . Reminded the meeting that the AGM was approaching in 8 th November at the Canley Heights RSL with a lunch in the Bistro to follow. He requested the committee nominations be forwarded early to facilitate a seamless process at the AGM.
- . The perusal of the end of financial year figures . Income and Expenditure and Profit & Loss would be supplied to the senior executive and Jim Fitzgerald for oversight and comment.

Webmaster Update.

- . Webmaster Bob advised that we have 314 followers and that the number of views of the monthly newsletter had dropped under the 200 mark.

Public Officer Report.

Gordon will be providing the AGM Agenda, nomination forms and Proxy nominations for distribution to members via our Website and face book page.

. **web Performance...**

Health Report:

- . A general discussion about health ensued with the usual suspect illnesses mentioned consistent with our age. Covid appears to be waning in our community among the VAXed population. Reports of 2 nd and 3rd infections are also about – stay alert!!!!

General Business and around the grounds:

Discussions ensued on the following:

- . **Terry Erbs** mentioned that the 150 th Anniversary of Artillery will be featured during ANZAC day commemorations next year in Brisbane.
- . **Rieny Nieuwenhof** advise that a mini re-union for the 70/71 131 vets will be held at Castlemaine Vic in October 2022.

. We received an advice: to “suggest the Association consider a Life membership subscription to the RAA Gunners’ Fund. It is \$260. At present only the 107 Fd Bty Association and Coast Artillery Association have contributed, 13 Associations had contributed to the Regimental Fund which the RAA Gunners Fund succeeded.” The details of the levels of membership were explained. However, the meeting saw little value in pursuing the association Membership and preferred to leave that option to the individuals interested.

If you’ve got more photos that you want added, just send them to: - Paul Dickson – web Photos
131eyesandears@gmail.com– BUT DON’T FORGET TO ADD TITLES/NAMES ETC.

. Upcoming Events Calendar –

131 Locators Association Committee Meeting
Date: Tuesday, 11th October , 2022 at 1100hrs
Venue: Canley Heights RSL & Sporting Club
26 Humphries Rd, Wakeley NSW
And available via Zoom link to be advised.



. Birthdays in the Battery...October –

DATE	NAME	REGT NO	SVN In	SVN Out	COMMENTS
1	IAN BRIGNELL	2789405	20 01 1969	21 01 1970	
2	TERRY BRUCE	2783213	05 05 1967	30 01 1968	
2	PETER TEATHER	3790242	12 04 1968	06 08 1968	
2	LESLIE ROBINSON	217662	09 12 1968	28 11 1969	
3	WELCOME HOME	ALL	1966	1971	Det 131
4	LEIGH HEMMING	1732039	04 05 1967	12 12 1967	†02.03.18
4	MICHAEL LUFF	2783725	02 01 1967	27 09 1967	
4	DAVID LAHORE	3791183	02 09 1968	04 03 1969	
5	JAMES MERCHANT	2788817	18 12 1968	28 11 1969	
7	GARY CHILLINGSWORTH	313477	29 11 1970	05 08 1971	
8	JOHN O'NEILL	243505	09 11 1970	11 11 1970	
	" "		11 03 1971	12 05 1971	RAEME
9	BRIAN SMYTHE	1201484	02 09 1968	03 12 1969	
10	BRIAN KENNEDY Capt.	213488	02 03 1965	11 03 1965	3 RAR
	" "		26 08 1969	27 08 1970	131
10	PAUL DICKSON	1732012	04 05 1967	12 12 1967	
10	BARRY BONSER	37661	03 01 1967	27 09 1967	† 03.09.98
11	PAUL JONES	216324	22 04 1966	30 04 1967	† 09.09.68
11	JEFFREY EVANS Maj	3789164	10 02 1971	02 06 1971	† 23.12.11
	" "		02 06 1971	02 11 1971	12 Fd Regt.
12	ALAN CLEASBY WO2	36053	02 12 1968	10 12 1969	131
	" " "		11 06 1972	20 11 1972	AATTV
12	BARRY EDWARD FOUNTAIN	3798485	03 03 1971	20 08 1971	† 12.05.22
	" "		21 08 1971	30 10 1971	Det131/12 Fd Regt.
13	PETER SALI	1735560	24 02 1970	18 02 1971	† 10 03 2016
13	DENNIS AVERY	4720906	19 08 1970	09 06 1971	4 Fd Regt.
14	ANTHONY DODDS	16776	04 05 1967	02 04 1968	
14	NORMAN LINDROOS	3410957	20 05 1968	24 05 1969	
14	PETER McGANN	55672	27 11 1969	19 11 1970	
16	WILLIAM THOMAS	16727	{07 01 1967	19 03 1967	1ARU
	" "		{20 03 1967	26 09 1967	
17	TORIN WHITE	218372	21 02 1969	25 02 1970	
18	HELMUT LEMPA	38120	20 05 1966	06 12 1966	† Unknown
18	ARTHUR JUX "TED"	2792371	29 04 1970	18 03 1971	
19	IAN FINLAY	2412363	27 11 1967	19 11 1968	

20	ROBERT HARRIS Sgt.	213514	10 02 1971	29 07 1971	
22	STEPHEN WYNN	2251369	CMF 130 BTY		
23	JOHN VITKOVSKY	4718271	02 03 1967	12 03 1968	
23	NORMAN BULLEN	214545	20 05 1966	11 12 1966	
22	IAN BOARD	213879	22 04 1966	11 12 1966	
25	DEREK SMITH	1108315	N/A		131 1990'S
25	MICHAEL DELANEY	2789205	17 02 1969	28 11 1969	† 17.02.13
28	MICHAEL BOHL	1411182	08 02 1968	17 12 1968	† 15.06.93
28	DAVID DOYLE Sgt.	17760	{22 04 1966	11 12 1966	
	" "		{24 09 1970	08 02 1971	
28	IAN MURLEY	38503	12 04 1968	23 04 1969	
28	PAUL TYS Lt.	235362	17 03 1969	18 03 1970	
29	JAMES "ZEKE" RITCHIE Sgt.	2411899	21 05 1969	09 04 1970	
29	PETER LARKIN	3793067	08 11 1968	19 11 1969	
30	GRAHAM O'TOOLE	61497	20 05 1966	11 12 1966	

*Above colour background coding explanation – Red – financial Locator, Yellow – located Locator, Black – passed Locator, Blue – honorary Member, White – NOT Located Locator.

Ed – 9 blokes not highlighted needs attention to see if thes blokes can be Located.

. **Locator Profiles** – we've received 172 and we've sent out 172. Ed – Maybe we need to draw in a deep one so as to hold our breathes for a while longer.

. **Located...**

Have a look at the Association's web site - <http://www.131locators.org.au> – you might find some lost mates or get in touch with us and see if we can for you.

Vale



Name: Windsor, Elizabeth Alexandra Mary
Rank: HRH Queen Elizabeth II
Captain-General
of the Royal Regiment Australian Artillery
Service In: 06.02.1952 Service Out: 08.09.2022
DoB: 21.04.26 DoD: 08.09.22



Lest We Forget



The 131 Locators Association expresses our sincere thought at the passing of the Monarch, the late Queen of Australia. In her passing, we thank and and admire her continuing service to our nation. She was an integral part to all of our lives.



May She Rest in Peace



Name: Bassford, Jeffrey Ronald

Service No: 2792419 Rank: L/Bdr

SVN In: 30.04.1970 SVN Out: 14.04.1971

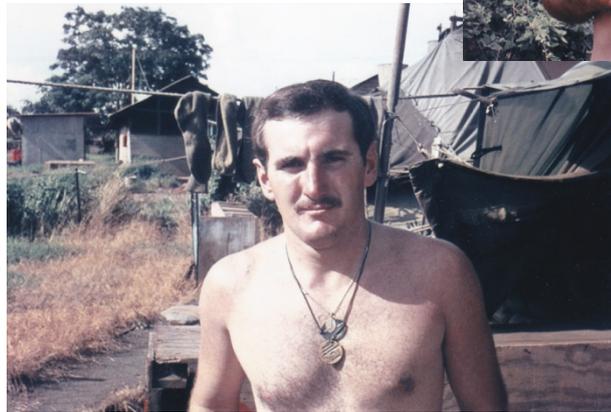
DoB: 21.04.49 DoD: 19.06.22

Lest We Forget



Jackie Bassford, responded to my (Ed) general email with the photos as attachments –

“Dear Paul, I have enclosed some photos of Jeff, hope they are alright. Jeff became somewhat reclusive. He had been very sick for a long time. The photos I have sent are very special. He really loved the 131 Unit. Thank you for what you do, Jackie Bassford (Jeff’s wife).”



Jeff

Original Australian Unattended Ground Sensor / Sensor Course Participants - ARVN Signals School, Vung Tau. Back-Standing-Lto R:Pfc Ryder, USA; Pfc Rosenfeldt, USA; Cpl John Anderson; Captain Norm Gomm; Gnr Stuart Telford, Bombardier Albert Jacka; Gnr John Lucas; Gnr Laurie Mion; Major Cooper, USA; Gnr Warren Jaenke; Frontrow squatting-L to R:Pfc Patterson, USA; Gnr Geoff Carthew; Sgt John Brewer; L/Bombardier Jeff Bassard; Gnr Gary Navas; L/Bombardier Richard Edwards; Sergeant, 1st Class Oliveri, USA. Taken 10/11 July 1970 - Vung Tau.

. **Bill Taggart** – “From the 1/83rd family, rest in peace brother. Bill.’

The following encapsulates **Jeff’s involvement in assisting to establish the Association Banner, the Association formation and the 1978 Welcome Home Parade Day for the Detachment –**

Ed – I thought it appropriate to revisit a very brief portion of **Peter Summer’s Recollections with regards to “The Det 131 Div Loc Bty Reunion and Dragon Banner’ story”** which includes the following extract mentioning Jeff.



Merv Nairn, Peter Summers, Kevin Browning and **Jeff**, 1987

After Anzac Day, 1986 I (**Peter Summers**) got together with **Jeff Bassford** for a two-family gathering. During the afternoon, we discussed the idea of a battery reunion of blokes who were in Vietnam at the same time as ourselves. We were both disillusioned by going to Anzac Day parades and not finding anyone we knew from the Battery at the time we served. We also discussed the idea of marching under our own banner instead of the post-1945 Artillery. The banner was a big success with all the members who marched, and I believe Jeff Bassford then took charge of the banner and kept it at his place, bringing it in for Anzac Day from then on.

...then the Association -

One thing led to another and we met at Jeff’s house on a Sunday to plan out how we would find everyone, as there was no Association then. The only thing we had was my South Vietnamese Flag, which all the boys had signed, plus our photo albums. The trouble was that only half the boys put any addresses on them. Even these addresses were suspect as they were often family addresses or the blokes had moved quite often in the last 19 years. On this first meeting a truly funny incident occurred that showed us how much you can get immersed in a situation and lose touch with reality. We had been looking at the flag for about 2 hours recalling names and incidents before we opened the photo albums. As we got to a group photo I remarked quite innocently that, “All these blokes have aged well - they haven’t changed a bit”. It still took me about five minutes after everyone else had erupted in laughter to realise that I was looking at almost 20-year-old photos. All the reminiscing had taken me back to that time even though I was well aware that I was in Jeff’s lounge room with our families.

We then started to make contact with the blokes we could track down, as luck would have it each one knew of someone else and it soon gathered steam. As we got rolling some fellows had kept in contact with members from earlier and later tours so the lines started to blur in keeping it to only our tour. By this time the Welcome Home Parade was being floated in earnest and we thought that this would be the ideal time for a reunion.

Jeff and I had served in the later years and we were fortunate to recruit onto the committee Merv Nairn and Jed Carroll who were there in the initial deployment in 1966. We also co-opted Kev Browning who had served in the later tour but had extensive contacts in the Battery. We were now a committee of 5 from different suburbs in Sydney so our meetings were now at the Liverpool RSL club. Things were now taking on a life of their own and we were building up an impressive database.

Interesting things came to life as we looked for the more difficult to find members, and all the different tour years had similar experiences. It was nothing to remember a town that someone came from and find the same name in the phone book. After calling you were often diverted around the extended family including cousins till you found the right bloke. At times, you knew so much family history that you could have attended a family reunion and been accepted as part of it. As Jeff’s and my phone numbers were on all communications the wives became a focal point by answering the phone.

Jacqui, Jeff’s wife, and Pam, my wife, were answering calls from strange men all the time. Pam remarked that although she only helped with queries etc she felt she knew a lot of these fellas quite well. Often, I would get home from work and Pam would fill me in on what so and so had been up to since the war. It was a very exciting time for all of us.

...The Reunion –

The next thing to address was where to hold the event and a number of venues were suggested. At one of our brainstorming sessions someone suggested that as we had all been through the school of Arty wouldn’t it be a blast to have it there. Never ones to shirk from a challenge Jeff contacted the Commandant and set up a meeting. Jeff and I duly turned up at the school and had a good conversation with the boss and the RSM. We outlined that we would like to use the school to put the boys up and feed us, we were very happy to pay the costs. We also asked if the caterers would like to do a dinner for us after the march again at our cost.

Vietnam service reunion

AN army unit which saw six years service in Vietnam will hold a reunion in Sydney on October 3.

The unit, Detachment 131 Divisional Locating Battery, served in Vietnam from 1966 to 1971.

Although members of the unit were returned to Australia after 12-month tours, it still held the distinction of being the longest, continuously-serving Australian unit in the war.

The reunion will be held after the Vietnam Veterans' march through Sydney streets on October 3.

The venue will be the School of Artillery on Sydney's North Head near Manly.

Inquiries should be directed to reunion organisers Jeff Bassford on 211 5611 or Peter Summers on 631 4794.

Jackie Bassford sent this newspaper clipping in from Jeff's archives –

"Paul, I just came across this article, might interest you. Thanks again, Jackie"

As the School had never been asked for this before there were a lot of protocol issues to be dealt with. We found the School absolutely fabulous to deal with and without their assistance the whole procedure would have been much more difficult. After due course the RSM got back to us and said that the Army and the School thought the idea was so good that they extended it to the Regiments and Batteries as well. We were quite happy with this idea as the more the merrier. The RSM also confirmed that the School would have a welcome BBQ on the Friday night and breakfast the next morning at their expense. He also said that all returned gunners could stay at the School Friday and Saturday nights at no cost as well. They would put up stretchers in the gym and use any rooms not occupied. This was a great help to us.

Next the RSM said the caterers would be happy to cater for our reunion lunch. So back to North Head for Jeff and I to discuss the details with the cooks. The menu selected and the times numbers etc worked out they worked out a price. We then contacted all the members we had located and advised the arrangements and costs involved and they were all happy to go.

It was incredibly special to regain contact with mates that in a lot of cases you had not seen since you left SVN and the years rolled back quickly. Before the BBQ was over we were all in our twenties again in our heads.

We all caught the ferry to Circular Quay for the march and again back afterwards for our dinner. The food and company was fantastic and the day just rolled on.

The Det 131 Div Loc Association.

Everyone was caught up in the idea of keeping in touch so we formed the first version of the Det 131 Div Loc Bty Association. The association was duly formed with the same committee that had organised the reunion and everyone there was now a paid-up member. We arranged branches in QLD and VIC with SA and WA having a contact person as well. The idea was that each Anzac Day we would all meet and march together. Decisions that the committee organised before handing over were the Battery banner and the James Menz portrait detailed later. After a period of time the original committee was finding it hard to continue with the commitment. Jeff's job had suddenly increased fourfold; the company I was with went bankrupt; Kev Browning was on pre-discharge leave from the Army and job hunting; Jed Carroll had a work accident and lost a leg, and Merv Nairn was in the same boat with family and work commitments. The Qld branch was by then well organised and took over the running of the show. They did a great job in keeping in touch with everyone and arranged a reunion/Anzac Day march at the Battery some years after. Again, we were put up by the Army in tents and had the Dawn Service and a gunfire breakfast at the Battery. After the March, we adjourned back to the Battery and looked over all the new gear they had, plus some from our vintage.

At around this time my family decided on a change of scenery and moved to Canberra. We had a good group for the 93 opening of the Vietnam Memorial from the Detachment. At one stage, we had 16 blokes sleeping on the floor of my family room and some of their families scattered throughout the rest of the house. It was a great weekend and memorable, with our teenage boys laughing with their mates as they saw all these old teenagers going into the peep shows and sex shops. Their merriment died up when they spotted their Dads among the crowd.

Ed – my thanks to Peter Summers for this amazing story of perseverance.

**At the going down of the sun and in the morning we we remember Jeff.
May He rest in Peace.**



131 Locators Association is always on the lookout for new financial members. With the establishment of the web site we continue to be burdened with the ongoing cost of maintenance etc and we need to be able to support this effort equally.

So, if you're a non-financial Associate receiving emails and the *Eyes & Ears* regularly you could bite the bullet and email Grahame Dignam:sectreas131locators@gmail.com and he could forward you the relevant forms to join - Memberships are available for 1 year or longer deposit a DONATION direct (add your name) to the associations account at "A/c Name: 131 Locators Association Inc. Bank: Westpac, Kingsgrove NSW BSB No: 032 166 A/c No: 264133"

Hope we hear from you?

Website: <http://www.131locators.org.au>

. Other related sites...

. Locating, Surveillance & Target Acquisition Association...



LOCATING, SURVEILLANCE & TARGET ACQUISITION ASSOCIATION

The Eyes and Ears of The Battlefield



Australian Artillery Association – www.australianartilleryassociation.com



ROYAL AUSTRALIAN ARTILLERY HISTORICAL COMPANY

www.artilleryhistory.org



Website link - <http://www.vvaa.org.au/>

Website link - <http://www.dva.gov.au/Pages/home.aspx>

. VETERAN'S AFFAIRS WEBSITE

The Dept of Veteran's Affairs has launched a new mental health initiative to assist veteran's experiencing the affects of mental illness and their families. Providing information and fact sheets about understanding mental illness, links and contact information for accessing support, and online resources for health professionals, this website focuses on helping veterans identify early warning signs of mental illness to effectively manage their mental illness and seek treatment. For more info or to access, please visit www.at-ease.dva.gov.au

. 1st Battalion 83rd Artillery...



Dedicated to the men of the 1st Battalion 83rd Artillery who served in Vietnam from 1966-1971. We left Fort Sill in October 1966 for Vietnam. We originally were at Bear Cat, Nui Dat and Xuan Loc. We later were in many other locations in Vietnam. We also welcome our Australian and New Zealand Allies to whom we owe so much.

It is also dedicated to those members of the 1/83rd who did not return. We will never forget their sacrifice. Website: <http://www.1stbn83rdartyvietnam.com>



The Royal New Zealand Artillery Association

<http://www.rnzaa.org.nz/>

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