Another year and another newsletter. Most of the input for this edition has been provided by Peter Jensen who also advises that the WW1 unit war diaries are all now on-line through the Australian War Memorial website - including the Topo Sect under 'First World War Diaries - AWM4, Class 16 - Tunnelling and Survey' - 1917 onwards. The Vietnam A Sect Topo Svpy Tp are also there of course.

In the Photo Gallery section, I have added a couple of pictures of 183 Recce Flight Bell Sioux helicopters (complete with pilots) that operated out of Lae in support of 8 Fd Svpy Sqn operations.
100 Years Ago – Survey Section Royal Australian Engineers (Permanent) in 1912

Produced by Peter Jensen from the official history of the Royal Australian Survey Corps 1915-1996, Australia’s Military Map-Makers by C.D. Coulthard-Clark

By early-1912 the Survey Section Royal Australian Engineers (Permanent) comprising the Australian OC (LT WL Whitham), two Australian draughtsmen (WOs JJ Raisbeck and GE Constable) and four UK Royal Engineer NCO topographers had been working for nearly two years on systematic standard military mapping for operations and manoeuvre mapping for training in 2nd Military District (NSW), 3rd Military District (VIC) and 6th Military District (TAS). These sub-sections were under command of Headquarters Military Districts RAE(P) for administration and discipline and under operational control of the General Staff Intelligence Sections (part-time militia officers of the Australian Intelligence Corps) of the military districts. Two of the original RE members opted to return to the UK at the end of their initial two year appointments. In their place CPLs Roseblade and Rossiter arrived in Australia 6 May 1912.

Mapping progress was boosted by recruitment of eight Australian NCOs - AJ Clements (Topographer), HPG Clews (Topographer), CA Favier (Topographer), M McEniery (Topographer) - discharged in December 1912, JH McDonald (Draughtsman), RJ Mollross (Draughtsman), AS Murray (Topographer), CV Radcliffe (Topographer). All of the new recruits were appointed CPL and soon promoted SGT in line with their RE counterparts. In September 1912 the Survey Section OC LT William Laurence Whitham resigned his appointment and commission to return to his civilian career as a licensed surveyor. He was not replaced for six months.

This establishment and personnel increase allowed new sub-sections to work on mapping for training at the newly established (1911) Royal Military College, Duntroon in Canberra ACT and standard mapping in the 4th Military District around Adelaide.

The technical method employed for map compilation was field sheets produced by the topographers by plane-tabling using the two-inch-to-one-mile parish maps, produced by the State Lands Departments, as the control and detail base. In late 1911 a military mapping conference chaired by the then LTCOL John Monash of the General Staff had decided to adopt the standard sheet size of 15 minutes of latitude x 30 minutes of longitude for the military standard one-inch-to-one-mile maps and that the maps would be produced in Australia using the photo-lithography capabilities of the State Lands Departments. Standard contour interval was 50 feet and the cartographic projection was the polyconic projection.

By the end of 1912 nine field sheets were complete, or in work - Newcastle and Morna point in NSW; Cranbourne, Anglesea, Western Port, Geelong and Woolamai in VIC, Canberra in ACT, Adelaide in SA. It was to be more than a year before the colour separated fair drawings for the first of these maps were completed by the 3rd Military District Draughting Section and printed by the VIC Lands Department in Melbourne.
Operation Beachcomber - Beach Surveys Papua
New Guinea 1975

By Peter Jensen

In 1967 the Chief of Staff Committee authorised surveys of beaches of the then Territory of Papua and New Guinea with the intent of collecting information about beaches to assess their suitability for amphibious military operations of various kinds. RASvy officer LT Jim Bounds and a RAN officer were sent to the United Kingdom for training and in 1969 the surveys got under way using an Attack class patrol boat HMAS Madang. The work progressed easterly from the PNG/Irian Jaya border and in six years had covered the north coast to the Milne Bay area in the south-east. Some other RASvy members involved in earlier beach survey operations were CAPT Charlie Watson, SGT Chris Dahlberg, SGT Jock Kay.

A limitation of using a patrol boat was of course not being able to test the survey with a beach landing and in 1975 the operations changed to be based on Landing Craft Heavy (LCH) and the composition of the survey team changed from seven personnel to five - RAN CO and CO of PNGS Salamaua (LCH), RAN Petty Officer Survey Recorder, RAN Able Seaman Clearance Diver, RAN Able Seaman Photographer and Army RASvy Sergeant Topographic Surveyor. The crew of Salamaua was a mix of RAN and PNGDF personnel with the key appointments of Executive Officer, Coxswain, Chief Engineer, Electrician and Chef all being Australians.

In February 1975 I was attached to the Beach Survey Team from 8th Field Survey Squadron, Popondetta, and joined the LCH in Port Moresby when it returned from a hydrographic survey for a safe inshore route south-east of Port Moresby. CPL Brett van Leeuween, also of 8th Field Survey Squadron, had been part of that survey and had obviously enjoyed himself very much working with the Navy. The CO was LEUT Bob Willis (later Commodore RAN Hydrographer), then a general seaman officer and graduate of the RAN Naval College, who enjoyed surveying so much that he changed to be a hydrographer after completing B Surveying (Honours) at Univ NSW. PO surveyor was Kevin (Shotgun) Slade (later Lieutenant Commander) who had a lot to do with the Survey Corps from both the Hydrographic Branch and the Hydrographic Office as a sailor and later as a civilian.

After refuelling, revictualing and taking on extra survey stores (theodolite, levels, staves, measuring tapes and complete area stereo-coverage of the recent RAAF Operation Skai Piksa, scale 1:120 000 vertical black and white aerial photography), we headed to our beach survey area of operations of Normanby, Ferguson and Goodenough Islands in the D’Entrecasteaux Islands group north-east of Milne Bay. We transited the new inshore route and took the opportunity on the way to exercise and develop our standing operating procedures. The CO had been briefed on the survey requirements in Canberra at Joint Intelligence Organisation.

The LCH had been fitted with an outboard depth sounder and for the survey carried two 16foot Hercules outboard powered boats (one with half-cabin and continuous paper chart depth sounder, and the other as a support boat) and two Honda 90cc step through motor bikes for the land surveys. Our normal survey method was:

- an office assessment of the existing charts and maps
- an office stereoscope based assessment of the aerial photography looking for obstacles in the water, beach extent, beach gradient, topography/obstacles behind the beach and
beach exits (aerial photography had been used for the first time for surveys for amphibious landings at Gallipoli in 1915)

- beach reconnaissance to confirm the office assessments including obstacles behind the beach
- a clearance diver survey of obstacles (mainly coral niggerheads) and bottom composition
- photographs of the entire beach from seaward from various distances from the beach, panoramic views from both ends of the beach, views to seaward from the ends and middle of the beach
- depth sounder surveys orthogonal to the beach, about every 25m along the beach, linked by time to the tide
- above the waterline beach gradient by level survey
- photographs of boot imprints in the sand at various places on the beach - to later determine the engineering strength of the materials to support tracked and wheeled vehicles at various stages of the tide
- topographic and geographic survey plans and photo annotation of behind the beach, exits off the beach, local communication infrastructure, village information etc
- report compilation including detailed beach plans

Our days started with a just after dawn departure from the LCH in the two boats, heading for the first beach which may have been up to 20 miles distant. Dress of the day was ‘pirate rig’ with our uniforms kept in good order for visiting ports along the way. After a morning of beach survey we would normally rendezvous with the LCH for lunch, then depart for another survey and meet the LCH again later in the day. The CO would review the survey results and decide on which beach he would land the LCH. This was not always easy, in particular on shallow gently shoaling beaches, where if the ship was going too slow a vacuum would form under the hull essentially sticking the ship to the bottom. Here the stern anchor had to be dropped on the approach to winch the ship off the beach if it was stuck. This area was poorly charted and the LCH was not allowed to transit at night, which meant that a safe anchorage had to found late afternoon. Many times this allowed the crew and chef to have a ‘banyan’ (Navy term for BBQ) often with fish caught the night before aided by the ships floodlights over the side to target the desired meal. Shotgun and I then compiled the survey data into a report and survey plan (including beach approach contour plan and obstacles and air photo annotations) of the beaches done that day. The only suitable place to do this was the officers’ wardroom table, something which really upset the young SBLT Executive Officer, especially as the CO would normally invite us to have a beer after we had finished the reports and planned the next day’s work.
Exercise Beach Survey methods - Peter Jensen, PNGDF Engineer officer, RAN Photographer

Depth sounding - the distance from the beach, determined by sextant angle subtended by fixed marks on the ranging pole, was marked on the continuous rolling paper chart of the depth sounder
Survey assistants - local school class

Shotgun and Clearance Diver Sammy

Refuelling the survey boats
Coconuts for morning tea

Beached - an easy one
In March 1975 PNG was in the period between self-government (December 1973) and independence from Australia (September 1975) and as a part of that transition defence responsibilities were being devolved to PNG. Maritime units, including HMAS Salamaua, were transferred to PNG and in early March on ‘devolution day’ the flag of PNG was raised for the first time at 0800hours on PNGS Salamaua as we steamed past Samarai Island south of Milne Bay.

Not long after devolution day the LCH was assigned to the BLUE force for Squad Ex Seven, which was the annual exercise of the seven maritime units of the PNGDF (two LCH, five patrol boats). The exercise scenario was that the BLUE force of two LCH and three patrol boats had to stop the RED force of two patrol boats from entering Milne Bay. There are many seaward islands in the approaches to Milne Bay and it might not be easy to detect an incursion of small vessels. PNGS Madang, a BLUE force patrol boat, had an unserviceable radar and I was sent over to the patrol boat as an additional lookout/watchkeeper armed with binoculars. After the traditional ‘banyan’ to start the BLUE force part of the exercise, and to give the RED force time to disperse to sea, we headed out to our patrol line about 50 miles to the east. At first light we sighted a boat slipping behind an island about 8 miles to our south and after signalling to exercise control in Port Moresby, were given authority to go onto two engines and check out the sighting at Action Stations. Soon after, the suspect vessel emerged at the far end of the island and we identified it as a patrol boat. Light was still very poor and we could not identify the boat which had obviously seen us but did not heed our signals (including firing flares) and orders to heave-to. They could not outrun Madang which was then on the two engines and they eventually stopped. If they were monitoring the radio signal traffic they should have realised that they were our target. To our surprise we found that we had captured a friendly BLUE force boat, which was 20 miles off its patrol line collecting coconuts.
for breakfast!! A few shouted expletives were exchanged between the boat COs and we headed back to our patrol line leaving the other PNGDF CO to explain himself to the exercise controller. Overall the ‘good guys’ won.

BLUE force Squad Ex Seven in Milne Bay

A dry-run with one of the two heavy machine gun main armaments on the LCH, before going to ‘Action Stations’ and conducting a live fire gunnery practice (not in ‘pirate rig’). A short burst from the 0.5 inch gun shredded a target 44 gallon drum (at about 500 metres) which leapt into the air and then sank immediately. At times the duty life guard also practised target shooting with a 7.62mm SLR to deter any sharks which might have appeared during our swim sessions off the LCH.
0800hrs Devolution Day March 1975 - first time the PNG flag was raised on PNGS Salamaua - a historic event

Helping the locals with their broken down boat
Our production of survey reports was not always up with the survey progress and we returned to Port Moresby with a deficit of reports intending to complete them ashore. The LCH was then booked into Cairns for a major service and the CO requested approval that I accompany the ship to Cairns and back to complete the reports during the voyages. The unit and the Australian Defence Group in Port Moresby reluctantly agreed, and then demanded my earliest return (as fast as an LCH goes) when I was promoted Sergeant during our very enjoyable sojourn in Cairns where we stayed at a hotel while the ship was in dry dock having its bottom scrapped.

The beach surveys were of course different to the geodetic and topographic surveys which I was used to, but my time there was certainly a highlight of that period of my service as a soldier surveyor. It was great fun working with the small joint team of different service cultures where we all brought different specialities and personalities to the task and I enjoyed working with the Aust/PNG integrated crew - it was a very productive but laid back operation. I was later told that much of the information which we had collected never got into the long-term records at Joint Intelligence Organisation.
Vale

DEXTER GARY CAMPS

18425 Dexter Gary Camps known as Rocky passed away 18 January in Wodonga Hospital. Lloyd Patterson advises Rocky had been struggling with ill health, mostly inflicted by poor nursing, for eight months. His heart was poor and his lungs kept flooding. From our draft nominal roll, Rocky served from 2 Oct ’63 to 26 Oct ’79.

Photo Gallery

Photos, old and new, related to RASvy Corps activities.

![Photo of Army Survey Regiment, Bendigo - Officers 1991](image)

Back from left - LT Simon Buckpitt, LT ….., OC Tech Dev Cell MAJ Peter Jensen, CAPT Mal Hensthell, LT Peter Liakopolous, LT Christine Frew
Centre from left - ADJT CAPT Geoff Ford, LT Denby Moylan, LT Matt Jackson, LT Peter Crabbe, LT……, MAJ John South
Front from left - OC Carto Sqn MAJ Graeme Wastell, OC Air Svy Sqn MAJ Peter Clarke, CO LTCOL Rene van den Tol, 2IC MAJ Ray Redman, OC Litho Sqn MAJ Bob Coote
RASvy Corps Conference - Army Svy Regt, Bendigo 1983

Back from left - MAJ Terry Edwards, MAJ Daryl Hocking, CAPT Peter Blaskett, MAJ Col Laybutt, MR Bill Hook, MAJ Paul Pearson, MAJ Don Maskew, CAPT Peter Jensen
Front from left - MAJ Simon Lemon, LTCOL Don Swiney, LTCOL George Gruska, COL John Hillier, LTCOL Jim Corless, LTCOL Peter Eddy, LTCOL Kevin Murphy, MAJ Pat Wood
A few shots from PNG (circa 1972) with 183 Recce Flight pilots operating out of Lae.

1972 somewhere in PNG. Bernie Gleeson (spelling?) with the all-important date roll in the front of the bubble. We luckily got off the station later that day after being clouded in.

1972 somewhere else in PNG. Terry Wesley-Smith (TWS) waiting for us to finish some barometer readings.

1972 still in PNG. Taxi arriving with TWS at the wheel.