

# CASCABEL

Newsletter of the Royal Australian Artillery  
Association (Victoria)

Editor: Lt.Col. R.M. Gaw

Asst. Editor: Capt. J.A. Davis

Number 5. November 1984.

## THE PRESIDENT WRITES

Dear Member,

At the Annual General Meeting in July, and in my absence, I was elected your President for this year. It was a matter of regret that I was unable to be present but my activity involved nine other people and had been initiated eight months previously.

I am fully aware of the presidential qualities of my predecessor and friend "Sandy" Mair and realise that he is a hard man to follow. You may be assured, however, I will do my best in endeavouring to maintain the concept and purpose of the Association.

The first event on the calendar which I attended was the annual Artillery Ball held at Chaucers. The RAA Band gave a very fine performance and so added to the colour of the evening. The splendid organisation of the Ball made it a pleasure for all those attending, and for those not able to attend, I commend the Ball to their attention next year.

During October, there was

a small ceremony at Batman Avenue when eight of nine graduates to officer rank were welcomed into the Mess. We were especially happy that our Patron, Brigadier Sir William Hall, was able to be present, and he gave a short but delightful "off the cuff" address.

This brings me to future events, and as two especially are now sufficiently close to be noted and arranged for in social diaries, I do encourage all members and gunners to give thought to them and endeavour to attend.

Gunner Happy Hour To be held at Landcox Street, Brighton drill hall at 1730 hours on Friday, 23 November 1984. Whereas the happy hour is an informal and uncomplicated event, it is indeed a happy hour if gunners turn up to enjoy the simple enjoyment of being together, having a drink and a nibble, and "chewing the rag", which, I think, is a naval saying. Just turning up will make it a success.

St Barbara's Day  
Barbara, good soul that she was, is made the excuse of many events. Many gunners will know of the affiliation between St Bartholomew's Church at Burnley and the gunner units which have, over the years, been based at Batman Avenue. The Vicar, the Reverend

Barry Brown, is enthusiastically looking forward to meeting gunners and their ladies on Sunday, 2 December 1984 at 1000 hours. This will be a gunner service and there is adequate room for good gunner bottoms on good church pews. Please turn up if you can.

During the afternoon, from 1200 hours, St Barbara will be commemorated at the drill hall and there has been good organisational work done in organising the RAA Band for the afternoon. A roast on a spit will look after appetites of all and sundry, and the Police Association and St John's Ambulance will look after the junior brigade. The old and famous police horse "Gendarme" will be on parade as well, as popular with kids as ever. During the afternoon, the RAA Band will be presented a drum major's sash and staff, donations for which have come from many parts. A flag lowering ceremony will take place at about 1700 hours and will be accompanied by a piper playing the Piper's Lament, which will close the day's proceedings. Do arrive and enjoy the day.

Other future events will be promulgated in another section of Cascabel, but I wished at this time to make note of the two above: especially underlined, and hopefully, we will have a good attendance.

See you on St Barbara's day!!

Maj P.S. (Norman) Whitelaw.

#### OBITUARY

It is with deep regret that your committee announces the death on 18 November of Colonel "Sandy" Mair, our immediate past President.

Sandy had been in poor health for much of this year. Nevertheless, his passing is a heartfelt blow to those of us who

knew him.

Lest We Forget.

2/15 FD REGT  
AFE 1984

2/15 Field Regiment conducted its annual field exercise for 1984 over the period 4 - 12 August inclusive. It was conducted at Puckapunyal and took the form of a courses camp aimed at qualifying members in the following areas:

1. Promotion, Subject 4 (Corps Subjects) for:
  - a. Warrant Officer,
  - b. Sergeant,
  - c. Bombardier, Operator Command Post, and
  - d. Bombardier, Gunnery.
2. Initial employment training for:
  - a. Gunnery,
  - b. Command Post Operator, and
  - c. Signalling.
3. Driver training.
4. Small arms appropriate to individual issue.
5. Army physical training tests appropriate to age.

Overall, 152 all ranks attended camp. This represents just 43.4% of our ceiling strength. In all, there were 80 students involved in the courses listed above. The very busy schedule was hampered by the lack of fully trained personnel and available equipment within the Regiment. However, pleasing results (89% of students qualified) were obtained thus satisfying the aim of the Regiment for its annual field exercise.

The first phase of the camp was aimed at revision and the completion of formal lectures prior to a second phase of testing and assessment. This second phase culminated in a field exercise in

which the students were assessed performing the actual duties within a firing battery. Heavy rain fell during this exercise which gave the new gunners and drivers a first hand introduction to life and some associated problems within a battery in the field.

The 1984 gunners' dinner was very successfully conducted on a Regimental level with officers and senior NCOs turning the tables and "acting" as stewards for the evening. A highlight of the evening was the presentation of a RFD, six RFM and five DFSM to members of the Regiment. The 3 Div RAA Band provided the music for a most enjoyable evening. The following morning, the 3 Div RAA Band was once again employed, this time for a Regimental church parade. This was to be the last occasion that Padre Lever would officiate as Regimental Padre and following the service a presentation was made to Padre Lever in appreciation of his past service and association with the Regiment.

Lt John Traill.

#### ARTILLERY MUSEUM

The RAA Historical Society is establishing an artillery museum at Manly in New South Wales, which will be opened officially next April. The exact date is not yet known.

The opening is to coincide with the 100th anniversary of the departure of Australia's Sudan contingent which was the first expeditionary force to leave these shores. "A" Field Battery was part of the contingent. At that stage, it had been in existence for thirteen years and has uninterrupted service since 1871 to this day.

Another point of interest is that one 5.5 inch Medium

Artillery piece - now just being phased out of the service - has been allotted to the care of the museum.

As further details come to hand, they will be published as it may be that some gunners will be able to be at the opening.

Maj P.S. (Norman) Whitelaw.

#### A LETTER TO THE EDITOR

Dear Sir,

I was delighted to receive my copy of the new Cascabel and very interested in the contents. Please accept my sincere congratulations.

So here I am, putting pen to paper with a couple of items for your consideration.

It is interesting, that after having gone through the horrors and tragedies of warfare, the incidents that survive in one's fading memory are only the amusing ones.

I remember very clearly the day in 1941 that 6 Aust Div captured Tobruk. I was a TSM with 2/1 Fd Regt. We eventually moved our guns inside the perimeter and after capitulation a long column of Italians came marching out heading for POW camps.

I was standing at our gun position watching them as they passed, and was amazed when one of them broke ranks and came up to me to shake hands. In a broad american accent he declared: "Boy! This is the greatest day of ma life."

I said "What are you doing in this mob?"

He replied "Ah went to Italy to see ma grandparents and that goddamned Mussolini put me in his f---ing army!"

It sure was the greatest day in his life!

Earlier we had captured Bardia and I will always remember an incident that happened there.

Our guns were well dug in and well camouflaged. One night we had been firing harassing fire all night. I had done my tour of duty as CPO and enjoyed a couple of hours sleep in a slit trench. At dawn, I crawled out, stretched and yawned, and looked around. To my horror, I saw a great white arrow of papers pointing right at our camouflaged gun position.

The papers all had brown stains and were caught on the small salt bush that covered the desert. They had been blown out of the latrine trench by the strong wind during the night.

I looked at the gunpits and the gunners were there but earning a well earned sleep. I did not have the heart to call out and order "Hi! You and you and you! Get out and collect that rubbish!" I did it myself.

As I was near the latrine trench with one collection, I heard the scream of an enemy shell coming right at me. I flattened out and stuck my head into the latrine trench. The shell landed about twenty yards from me, but fortunately it was a dud and I was only showered with desert sand.

The sound of the shell had woken up the gunners in the gunpits and I could not fail to hear these words: "That's the place for you, Sgt Major!"

Yes, there I was with my head in the shit.

In 1942, we returned home from the Middle East and after a triumphant march through Sydney, were rushed off to New Guinea.

When the Kokoda trail had been captured, we had to dismantle

our guns at Port Moresby and load them into good old DC3s and become the "First Airborne Artillery." We landed at Popengetta, reassembled our guns, and were ready for action on the Sanananda track.

When we reached Soputa, where 7 Div HQ was, I was approached by another officer who asked me if I was the officer in charge of the guns. I explained that my Battery Commander was ahead on reconnaissance to see where we could find a gun position in the jungle. He then said "The General wants to see you."

I was paraded into a tent and introduced to Maj Gen Vasey. He was noted for having a severe stutter and strong vocabulary. He said to me "Finlay! I want you to g-g-get these f---ing g-g-guns f-f-firing as quick as you c-c-can. I want the b-b-bloody j-j-japs to hear them and I want our poor b-b-blokes to hear them."

I learned later as an FOO, that our first "five rounds gunfire" was the greatest boost to morale in that whole miserable campaign.

Well, I hope I haven't bored you and that you will find some interest in my rather lengthy screed.

Yours Respectfully,

W.M. (Jock) Finlay, Maj. RAA (RL)

#### HAPPY HOUR

Date: Friday, 23 November 1984.

Venue: 132 Div Loc Bty,  
Landcox Street,  
East Brighton.

Timings: 5.30 pm until the bar runs dry.

Light snacks will be provided.

SUBSCRIPTIONS  
1984/85

Response to subscription notices for 1984/85 has been great so far. Thanks for making my job easier!

Renewal notices are enclosed for members who, according to our records, are yet to pay.

Capt Judith Davis,  
Treasurer/Membership Secretary

PS. If you have any mates that would like to join please send me their names and addresses and I will be only too pleased to send them an application form.

CHURCH PARADE

Your Association has decided to conduct a church parade on St Barbara's day 1984.

The church is located only a short distance (by car) from the Batman Avenue depot so you will be able to start the day with the church service (all colours of the cloth are welcome) and then move to Batman Avenue for refreshments and the St Barbara's day celebrations.

Date: Sunday, 2 December 1984.

Venue: St Bartholomew's Church,  
290 Burnley Street,  
Burnley. (Between Bridge  
Road and Swan Street).

Timings: 10.00am - 11.00am.

Your President, Norman Whitelaw, and committee member, Des Cox, will read the lessons. The Reverend Barry Brown is aware of the significance of St Barbara's day so we can expect the service to have a real gunner flavour. Reverend Brown has also accepted an invitation from the association to join us at Batman Avenue for lunch.

Let's make this year's St Barbara's day one to remember. See you at St Bart's at 10.00am!

Naturally, family and friends are welcome!

RIFLED MUZZLE  
LOADERS (RMLs)

In the last issue of Cascabel, a most interesting article was submitted by Colonel Alan Mason regarding "cannon" in the best sense ie ball firing muzzle loaders and their advantages and many disadvantages.

When one talks amongst gunners one finds very little is generally known of the phase when ball shot was superseded by "case" or cylindrical shot. It was found then that "windage" was less around a cylinder and secondly, when spin was applied, the shell ranged further, was able to be aimed more accurately and had a greater power on delivery.

My brother kindly sent copies of pages from manuals available to him, one of them being "The Treatise on Service Ordinance 1904." I consider that quoting from these pages (shown in inverted commas) will be the better way of explaining what occurred during the comparatively short time that rifled muzzle loaders were in vogue in our services.

One must also appreciate that a famous manufacturer of ordinance, Sir William Armstrong, had prematurely invented and produced a breech loading rifled gun which used a lead covered projectile. Armstrong, who had made his reputation with the invention and manufacturing of hydraulic machinery, turned his ability to the production of a more efficient artillery piece. He developed a method whereby a gun barrel could be built up from layers of wrought iron tube instead

of casting a large mass of iron and drilling out the bore. Wrought iron was the newer and the more reliable of metals and he sweated and shrank layers of tube together to make a gun barrel.

He was also able to improve accuracy by rifling the bore with numerous grooves. By coating the projectile with a lead sheath which engaged the grooves he imparted spin to the round. This system presented difficulties in loading by the muzzle, and he soon was to develop a method of breech loading.

Eventually, after his appointment to the post of Superintendent of the Royal Gun Factory, Woolwich, he produced no fewer than 941 Armstrong guns by March 1861. The Royal Navy also accepted his design.

In practice however, the breech closing system showed weaknesses, tended to wear badly and became unsafe. Trials were made comparing RML guns against Rifled Breech Loaders (RBLs) and it was demonstrated that the methods "were about equal as far as ease and rapidity of loading and firing were concerned, but the simplicity and strength of the RML system decided the issue and the Armstrong's gun's days were almost over."

"As already mentioned, one of the chief values of rifling is that an elongated projectile can be used and the advantages of an elongated projectile can be thus summarised:

a. A diminished surface for the same weight is offered to the resistance of air and thus greater range and greater power at given ranges are obtained.

b. The trajectory being flatter, the probability of hitting a target is increased.

c. By varying the length, different kinds of projectile for the same gun can be brought to the same weight, and

thus complications in range tables are avoided.

d. On the other hand, if desirable, a specially heavy projectile may be fired. A shell of the same weight as a smooth bore gun can be fired from a much lighter gun, or a heavier shell from a gun of the same weight. The capacity of the shell for powder or bullets is thus increased.

"Rotation is imparted to the projectile by means of the rifling, or grooves cut spirally in the bore, which exert a pressure against studs, gas check or driving band. The lateral thrust, when properly distributed over the surface of the projectile compels it to turn on its axis while onward motion is being imparted to it by pressure of gas in the bore. On leaving the muzzle, therefore, two kinds of velocity will have been impressed on the shot: a velocity of translation through the air and a velocity of rotation about its longer axis of figure.

"In the muzzle loading guns of our service, there are two distinct arrangements applied to projectiles to compel them to follow the grooves, viz:

a. By means of large studs on the body, or

b. By projections on, or expansion into, the grooves of a "gas check" attached to its base.

The projectile must be able to pass down the bore of the gun when loading, and there must be clearance or windage in the grooves as well as over the body of the shot. This windage affords the opportunity for the powder gas to rush past the projectile before it has been well set in motion, and in so doing it scores the metal and ~~destroys the rifling and bore of the gun.~~ With the use of gas checks, this evil is partly avoided; but whether the rifling is intended for gas checks or studs there are points of similarity in all muzzle loading systems, such as the existence of a "loading side"



in the groove, and usually some method of centering the shot."

Forms of groove in the rifling of the day, each demonstrating some point for lessening the wear or sealing the bore on firing, or imparting spin to the projectile, in the case of RML guns were about five in number, quite distinct types.

With larger pieces of ordnance, in order to load the round, a bag carrying the powder charge was placed in the muzzle and rammed into the chamber after sponging out with a wet sponge-rammer. The round was then lifted by hand or by a "loading davit" attached to the gun at the muzzle and placed in a shot bearer. Depending on the size of the gun, the davit was generally attached to the muzzle and folded back after loading where it remained. The shot bearer was slotted over two studs at the muzzle each side of the bore. To facilitate centering of the round, especially in larger pieces, some guns were "bell mouthed." To quote from the treatise again: "The 6.6 inch, 10 inch and upwards are bell mouthed at the muzzle; that is to say the metal around the entrance to the bore is filed away to the extent of a quarter of an inch; the slope is then carried to a distance of 1 1/2 inches down the bore, and the sharp angles are further removed especially on the face of the muzzle. The bell mouth has been added, like the splaying of the grooves, to facilitate loading and to relieve the strain on the barrel when a shot is just leaving the muzzle."

Due to the advance of time and technology which demanded longer gun barrels, the muzzle loading of guns became extremely unhandy, and this was especially so in ships. There was no space into which to retract a gun into the loading position. So the period during which the RML gun held favour was comparatively short and an equally interesting stage was

reached when great efforts were made towards the development of breech loading mechanisms which had differing characteristics from country to country and these characteristics more or less became traditional to those countries. Before the breech loader became generally accepted, however, two distinct opinions, for and against, were held, but:

"The RMLs became bigger and more powerful, reaching their climax in the production of four 17.72 inch monsters, the barrels of which weighed 100 tons, provided for coast defence in Gibraltar and Malta. With a charge of 460 pounds, these fired a 2000 pound projectile at almost 1700 feet per second, performance which is far from negligible, and which disproves the common belief that muzzle loaders lacked power. But to achieve such performance the guns were getting longer and heavier and the point was being reached where complex mechanical contrivances were having to be introduced in order to load them, particularly in ships.

Finally, in 1879, came the terrible accident aboard HMAS Thunderer. This ship was fitted with two 12 inch, 38 ton RML guns in a turret. To load, the guns were trained inboard, and depressed into loading ports in the deck. Acting on orders transmitted by bells and indicators from the turret, the loading crew would ram home the 85 pound charge and 800 pound shell with a steam rammer. Withdrawing the rammers, they would signal LOADED, and the guns would then train outward, aim and fire in unison.

On the fateful day, this drill was performed but one gun misfired. The noise and bustle in the turret prevented the crew from noticing the misfire, and as both guns were automatically retracted by hydraulic power ready for reloading, the absence of recoil was also unmarked. The guns swung, dipped, and the telegraphs

signalled LOAD, which the loading crews did. The guns trained out, the order to fire was given, and the double shotted gun blew apart, killing practically everyone in the turret and injuring many who were standing on the deck, watching the practice.

The advocates of breech loading pointed out that this sort of mishap was impossible with their system, which advocates of muzzle loading had, reluctantly, to admit. The Thunderer was the last straw; designs of breech loaders were once more demanded and this time the change was to be permanent.

Maj P.S. (Norman) Whitelaw.