



CAOSA Gunners Hints

Index

- Hint 1 Using a green fuse when priming in windy conditions.
- Hint 2 Using a paper straw for priming.
- Hint 3 Firing not shooting a cannon.
- Hint 4 Black (gold) Powder Savings.
- Hint 5 Movable Cannon maintenance
- Hint 6 Misfires
- Hint 7 The surrounding area

Gunners Hint 01

When firing a cannon in extreme windy conditions, the serpentine and priming powder can get blown away from the vent pan before the powder is lit. This makes it hard especially for a VIP Gunner to fire the cannon. To overcome the problem, push down the green fuse in to the vent hole simultaneously whilst priming and cut off the fuse a few mm above the vent pan. The time delay will be minimal after you light the green fuse using a lintstock.



½ pdr SML at Bloemendal Cannon Station

When priming with a straw, prime the straw simultaneously with green fuse and priming powder. Prime the vent with a primed straw, cut off the straw and pull the green fuse out a few mm. The time delay will be minimal after you light the green fuse using a lintstock.



Green fuse pushed half way down the primed straw

Erick Kellerman, September 2015

Gunners Hint 02

When firing a cannon primed with a plastic straw be aware of the fact that a part of the very hot molten plastic straw can be blown out the vent hole into the air directly above the cannon. This poses two real potential dangers to the gunner, the bystanders/public watching the firing and the environment.

- a) The gunner if leaning forward or standing too close to the vent hole when firing the cannon could get some of the molten plastic in to the face or eyes.
- b) The public standing too close to the cannon or in the direction that the wind blows could get some of the molten plastic blown onto them.

Johan Brandt had such an incident recently.

A spectator got burned on her hand, whilst standing downwind + - 10 meters behind the cannon.

To prevent this from happening as per the Gunner training manual:

- a) Always wear safety glasses when firing a cannon primed with a plastic straw. Never lean forward when firing the cannon. Make sure that the gunner always stands with his/her back to the wind when firing the cannon. This is especially important when a VIP is firing the cannon.

Make sure that no bystanders /public stand downwind when the cannon is fired and brief the spectators about the potential danger.

Comments: (By Erick Kellerman)

We are trained not to be positioned downwind when firing, however some of us, me included often break the rule due to photographers requests and other reasons. What I never thought of is the fact that the molten plastic straw can travel over such a great distance with the help of the wind and still cause injury or damage. But there is a possible fix !

Solution: (By Johan Brandt)

Prime with a paper straw (available from Mr Price). A paper straw disintegrates when the cannon is fired.

Johan Brandt, October 2015

Gunners Hint 03

Gunnery, as we all know, is a science rather than an art. This being the case, it behoves us to use terms relating to gunnery which have a precise meaning as well as the correct tradition. Thus one might examine the correct terminology for initiating the explosion which drives the projectile from the barrel. It is common usage to say you are “shooting a cannon” or “shooting with a cannon”. Which, I am afraid, is as wrong as its Afrikaans equivalent “ek skiet ‘n kanon af” or “ek skiet met ‘n kanon”.

Think about what is implied by the above. Essentially you are saying that you are shooting *at* some other cannon, which implies that you intend to cause harm to it by hurling a round shot or other projectile at it. This would be correct if that was your purpose – for example, to disable an enemy weapon by damaging the muzzle or vent, or demolishing the carriage, just as you might shoot a springbok by launching a rifle-bullet at it.

But the act of discharging your gun is another matter. When you do that, you are *firing* the gun (in Afrikaans, “ek het die kanon afgevuur”). In other words, you have touched the slowmatch on the lintstock to the priming charge, thereby completing a train of events which was set in motion when the barrel was sponged out and had a bag of powder rammed down it.

In doing all that – sponging, charging, loading, priming etc – you have prepared the gun for its prime purpose, which is launching a projectile (or projectiles, in the case of grape or canister) at an animate or inanimate target.

In other words, *firing* it. “Fire”, in practical terms, means *launching* something – which is why it is common to hear expressions like “he fired a torrent of curses at me.” The fact that nowadays it is most likely to be a blank charge that one fires does not invalidate either the process or the need for the correct terminology.

The correct terminology, embedded in centuries of tradition, therefore, is to say “I fire the gun” or “die kanon word/is afgevuur”. One might say that this is merely a quibble; but one should try to be as correct and professional in one’s terminology as possible, if only to honour the memory of the gunners of the past. It should never be forgotten that language is a precision instrument which is inherited from one’s forebears and, like any other inherited valuable, should be cherished and not misused.

One could take that further. How many people today know the correct Afrikaans artillery terms? For example, a gun-carriage is an “affuit”, an ammunition limber is a “kanonwa”, and an explosive shell a “kartets”, “lintstock” is actually a corruption of the Dutch “lontstok”, and “geskut” is the equivalent of the English “ordnance” when used in referring to heavy weaponry.

How many people still know the difference between horse artillery (the gunners ride on the gun-horses) and field artillery (the gunners ride on the carriage or limber, or both)?

Or that the professional name for that famous round iron projectile is a “roundshot” (both singular and plural), rather than “cannonball”, which is the sort of term junior schoolboys use when describing the projectiles fired in “Pirates of the Caribbean”.

Similarly, the immemorial custom seems to be that one calls a cannon a “gun”. One does not, after all, refer to “a 74-cannon ship”. And so on. We South Africans tend to get a little confused here, because in Afrikaans a cannon is a “kanon” – “gun” translates as “geweer”, referring to some sort of shoulder firearm, whether smoothbore or rifled.

“Shoot a cannon” is, I expect derived from a nasty Americanism, which has led to abortions like “I’m shooting a gun” when meaning “I’m firing a rifle”. In correct English usage, the only shoulder weapon which should really be called a “gun” is a shotgun, which is, of course, a smoothbore.

So let’s fire those cannons instead of shooting some cannon, kom ons vuur ‘n kanon af in stede om te skiet.

Comments: (By Erick Kellerman)

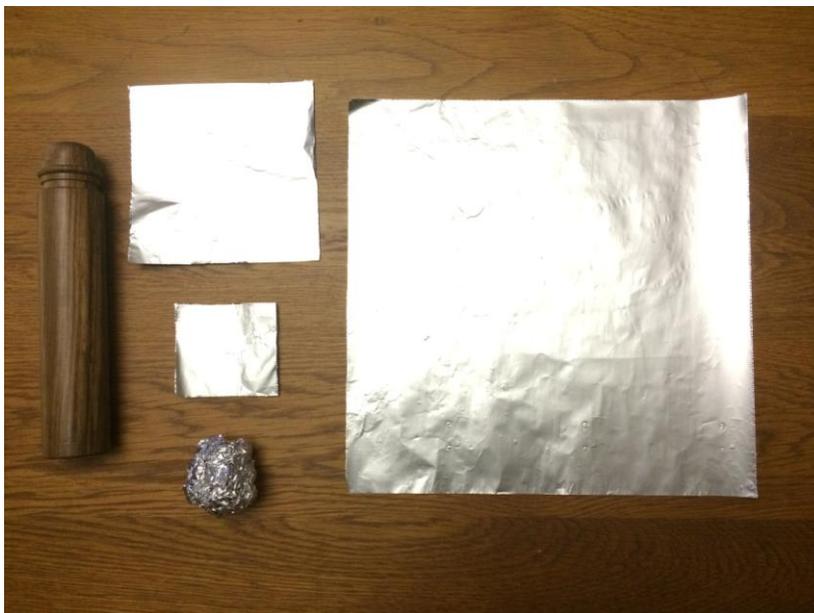
It took me quite some time in using the correct terminology when firing a cannon. “Ek het tot bietjie dag terug nog kanon geskiet “! I must admit, using the correct terminology not only sound better on the ear, but also is much more user friendly.

Willem Steenkamp, November 2015

Gunners Hint 04

“ Due to the extreme pricing and almost nonexistent availability of Black Powder in South Africa, it became very important to utilize what you have with utmost effectiveness.

I am not going to spend a lot of time on the normal procedure we all have been taught on how to make up a charge for your cannon. However, I use an addition to the main components in order to utilize every single kernel of black powder in my charge. This allows me to use less powder than before and still get an effective and impressive “bang”.

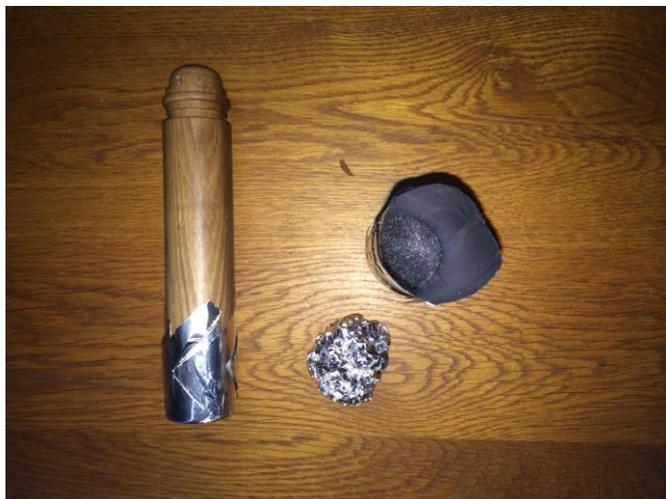


The picture above shows all foil components needed to make up a charge. However, you will notice an extra block (medium sized block) of foil.

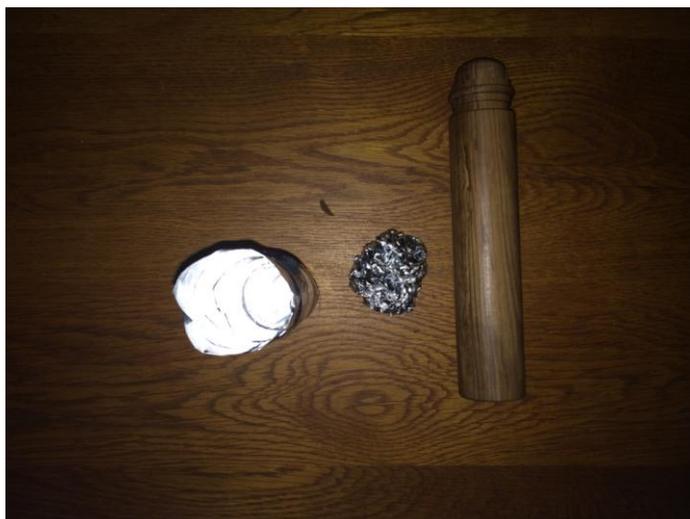
If one looks closely at the photo of a wad below, you will notice a huge number of voids, cracks, crevasses which will trap your black powder, especially if you use FFG. Depending on how you transport it, as much as 15% of your black powder can work its way into these voids in your wad during transport, handling and loading. Once rammed in the gun, you are sealing black powder inside the tinfoil wad, rendering it almost useless in producing maximum sound effect. This is where the extra block of foil comes in.



Once you have weighed your powder and filled your charge holder, use the medium sized block of foil to create a small charge holder/barrier.



This is then placed inside your main charge holder, on top of your powder charge.



This barrier prevents even the smallest kernel of powder to separate from your main charge and prevents some powder getting trapped and sealed inside the wad.



Most of us always take a “back-up” charge to an event. Just for in case. Take one of your backup charges which have travelled to an event and back, and open it over a white piece of paper. Remove the wad from the main charge and carefully open it over a piece of paper. Weigh the powder which became trapped inside your wad. Blasting powder does not cause as much a problem as FFG would. The kernels are mostly too coarse to work into the wad “.

Riaan Conradie, December 2015

Gunners Hint 05

Wash the cannon barrel out with the wet sponge after the firing is completed to reduce the encrustation of black powder in the barrel, when at home clean the barrel properly with soapy hot water, dry and oil.

Martin Venter, January 2016

Gunners Hint 06

Most of us have been embarrassed by a misfire at a public event. The causes of misfires can be classified into a few categories ; Failure by the gunner, failure of the gunpowder, failure of the made-up charge, failure due to the weather or a combination of the above.

The most famous gunner error is the failure to prick the charge through the vent, inexperience, haste and the size of the occasion are contributors to this failure - pay attention to what you are doing and this can be easily avoided.

When foil charges are made with double foil and in a sloppy manner a thick wad of foil occasionally blows back and firmly blocks the vent and it is not easy to clear it, particularly when the next charge has already been loaded. In this case the proper pre-firing checks would prevent it from happening and making the charges neatly would remove the cause.

Wet weather is a close friend of misfires, damp slow match or priming powder should need no explanation here, but cold weather deserves a mention. When the weather and the gun are very cold, and particularly when the apron flattens the pile of priming powder and there is a delay between priming and firing more heat is required to ignite the cold powder. The gunner ends up stirring the priming powder with the slow match but it refuses to ignite. This is best avoided by priming just before firing and bending the apron slightly so that it does not flatten the priming powder.

A misfire is not a calamity, it is an opportunity to demonstrate that you know what you are doing and to educate the onlookers.

Gerry de Vries, February 2016

Gunners Hint 07

I have been embarrassed by a broken leg at a public event. Dangers at the gun site can be classified into a few categories: Wet and slippery terrain, slippery shoes, lose shoe laces, rocks/stones laying around, mole holes and dangerous animals.

The surrounding area starts at the moment you leave your vehicle, take your gunners box and walk to your gun. A lot of things can happen to you before you reach your gun that can prevent you from firing your gun.

The wet and slippery terrain: Be very careful when you have to walk to your gun especially when the surrounding area has a slight angle, is wet or muddy. This is a recipe to slip and fall and even break your leg. This is what happened to me. Shoes with slippery soles contributed to the slip and fall.

Slippery shoes: Never ever wear shoes with slippery soles. Buy yourself a pair of shoes with a nice sole for a good grip.

Loose shoe laces: Always make sure your shoe laces are fasten at all times. A loose shoe lace will embarrass you when you trip and fall. It also looks very untidy if you walk around with a loose shoe lace.

Rocks/stones laying around: You can fall or sprain your ankle when you step on a rock or stone that's laying around at the surrounding area. Where possible always try to remove rocks and stones lying around.

Mole holes: Some surrounding areas are very sandy with lots of mole heaps and mole holes. Look where you are walking.

Dangerous animals: Some of the guns that we are firing are situated in Nature Reserves. With this extreme hot and dry weather conditions snakes are looking for cooler conditions. A two meter plus Cape Cobra was discovered laying underneath a gun carriage in the shade. On a nearby farm we found a wasp nest inside the barrel of a six pounder gun. We pumped smoke down the vent hole to get rid of all the wasps. Never look down the barrel of a gun. Always FIRST insert your worm and do your safety inspection.

To me a famous gunner error is the failure to take the whole surrounding area into consideration when you approach your gun. Please pay attention where you are walking, what you are wearing and what you are doing. And please avoided breaking your leg!

F Conradie February 2016