

ADVANCED SHOOTING PRODUCTS

In a Jiffy - Berdan to Boxer

A few days back Ronnie Teleng stopped past my place excited like a four year old child. I have come to know the CEO of ASP, and I do see a lot of my own excitement in his reactions when dealing with anything shooting related. Ronnie enjoys dabbling with technical and mechanical issues regards firearms, fixing and improving mechanics and processes around various issues that have plagued and frustrated shooters for 'yons' This was no exception. He noticed that I have a black 'tommel' full of military brass. 9mm , 7,62 (308 win) and 5,56 (223 Rem) are all part of my collection . I have never really had a need or use for the military afterthought left depleted and worthless on the range after plinking sessions. My father started me off collecting brass when I was still a "Pee-Wee" on the Rand water board range outside Alberton. As a point of interest, Golden city was just a single range in front of the club house those days. My dad was adamant that I should collect all brass, Military or commercial, as a matter of fact caliber was also irrelevant. I never understood the point, except that he always explained that one day it may be useful.

As I grew older and started reloading my own ammo, mainly because it was cheaper for me as a youngster. Bought ammunition could quite easily deplete my bank account into ruins. I found that reloading 100 to 200 rounds was usually cheaper than purchasing a commercial box of twenty rounds.

Over this period I tried all sorts of smart ideas to get the military brass into active firing and useful circulation again. Try as I might, those two little holes down in the base of the case just frustrated me to the point that military brass was consigned to a container where they could oxidize at their leisure.

It felt like Christmas morning when Ronnie dropped a box containing their berdan to boxer conversion kit along with the primer pocket Swaging press with me. I felt like the happiest little four year old this side of forty as he opened the goodies and started explaining the workings to me. A whole new avenue in my reloading career opened before me. If you are very mechanically minded the Ronnie is worth a call and a visit. He knows the tolerances, sizes etc. Some people are passionate about the math's and the values, I am just a plain joe soap, just a user, as they say in the computer literacy terms, but I love it all the same.

Pic 1 – Who doesn't just love a box full of new 'goodies' ?



Converting military, or any Berdan brass into usable boxer primed ammunition consists of two definite phases. Firstly you need a method or tool to remove those berdan primers and convert the case into a case which allows you to prime and use the single flash hole boxer primers. Drilling is an option but that is a huge task. I've tried many times. I found the biggest problem, was to ensure the flash hole is dead center otherwise you will break a few de-capping pins when you try to remove the new boxer primer once the round has been fired and the case returned to the reloading press. Fortunately in flies the superhero of the day , ASP (Advanced Shooting Products) !

They have developed de-priming dies with special hardened steel de-capping and swaging pins. These screw directly into any conventional reloading press, and function just as a standard de-priming die. These dies come in neat boxes complete with a spare de-capping pin. I am not sure of the actual metal used but I was told that they are harder than any product made by any competition. I am assured that ASP team will give you the actual metal particulars if you inquire. Pardon, like I mentioned I am just a user. These pins are also available to be purchased separately. These pins ensure that the flash hole is formed dead center because they center themselves on the case throat. So they are caliber size pins.

Pic 2 - Die sets and de-capping pins that are caliber size

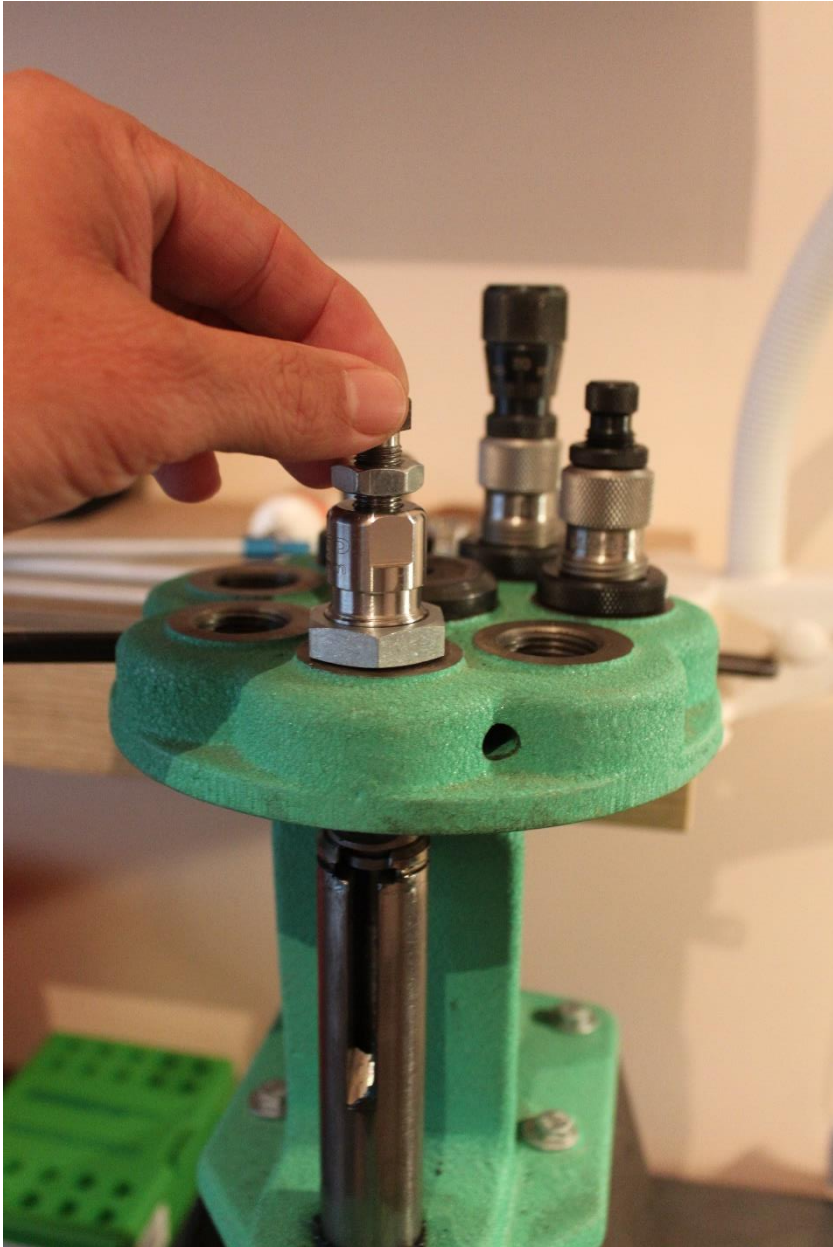


Pic 3 – Fix the die into the press



These conversion dies are suitable for use in any single stage press. Only 9mm is suitable for use in a multistage press because the conversion process is not stressful on the equipment. Swaging the flash hole is very gentle in the 9mm , on the contrary the 308 is much tougher with the 223 being the hardest to complete based on the amount of effort it takes to swage the hole and break off the anvil in the primer pockets. The thickness of the brass wall between the case and the primer pocket affects that. In the 9mm the thickness is around half a millimeter. The 308 is about 3 mm while the 223 is approximately 5mm.

Pic 4 – turn the Decapping pin in slowly and test the depth till it knocks the primer free and swages the boxer flash hole



Pic 5 – Fasten the lock rings on the Decapping pin to ensure it is centered



Place a case in the case holder and lower the press handle to lift the case into the dies opening. Then screw the die down until it touches case holder. Tighten the lock nut for the die. You can then proceed to turn the de-capping pin down until it makes contact with top of the primer inside of the 9mm case. Lower the press arm. Then turn the de-capping pin half a turn further in. Tighten the lock nut on the pin to ensure that it is centered and held fast. You can then raise the case again and test till you hear the pin force the primer free and break through the anvil area and force the flash whole open in the center of the primer pocket. It requires no effort, and makes a distinctive 'ping' when it does its job properly.

Repeat the process of slowly turning the pe-priming pin down till you hear that audible 'ping. 'The die is then set correctly. Ensure that the pins lock nut is tightened before raising the brass. Not fastening this nut is the main cause of the pin being damaged.

Pic 6 – Primer knocked free and flash hole neatly formed in the center of the old burden holes



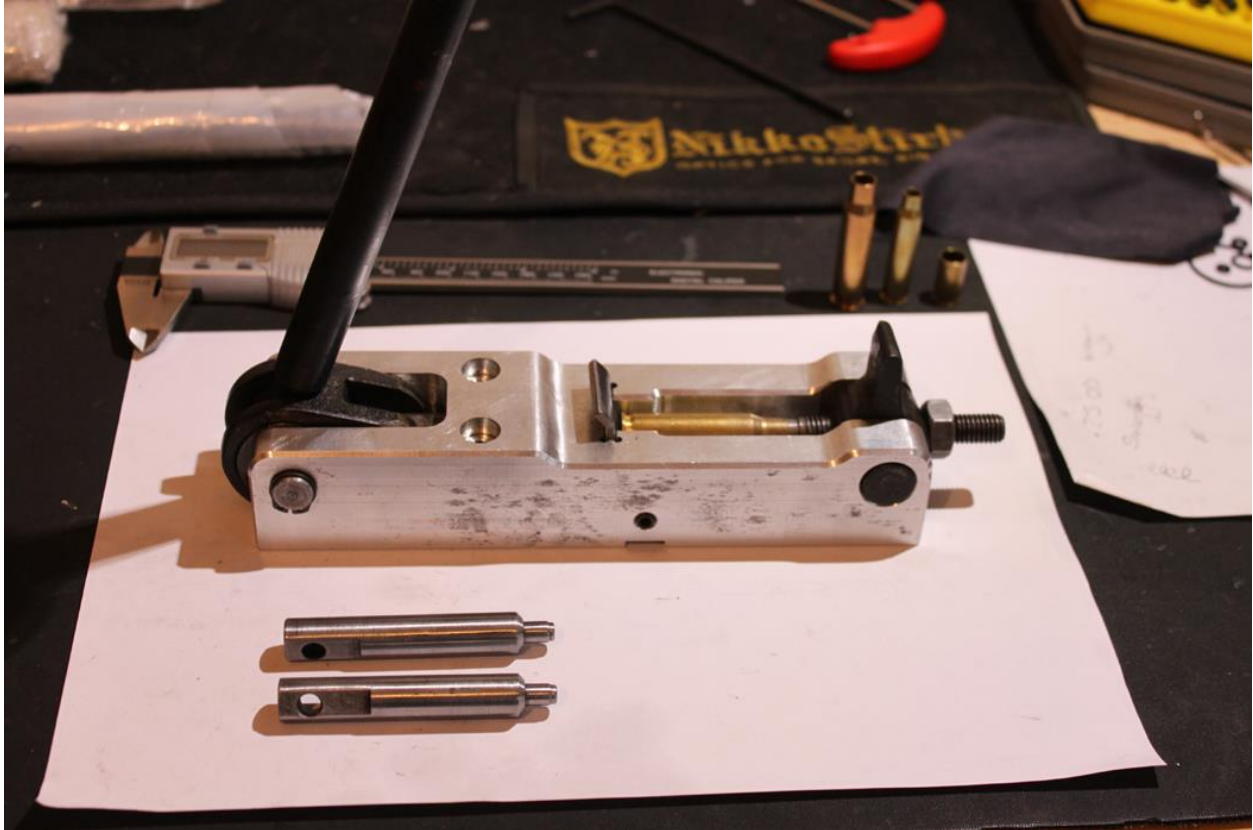
Please take care not to use the dies for the 223 or 308 on a multi-station press. They do not have the strength required for converting rifle brass.

Second phase

The second phase to the conversion of the brass is to ensure that the primer pockets on the converted brass are uniform and within specification for commercial primers.

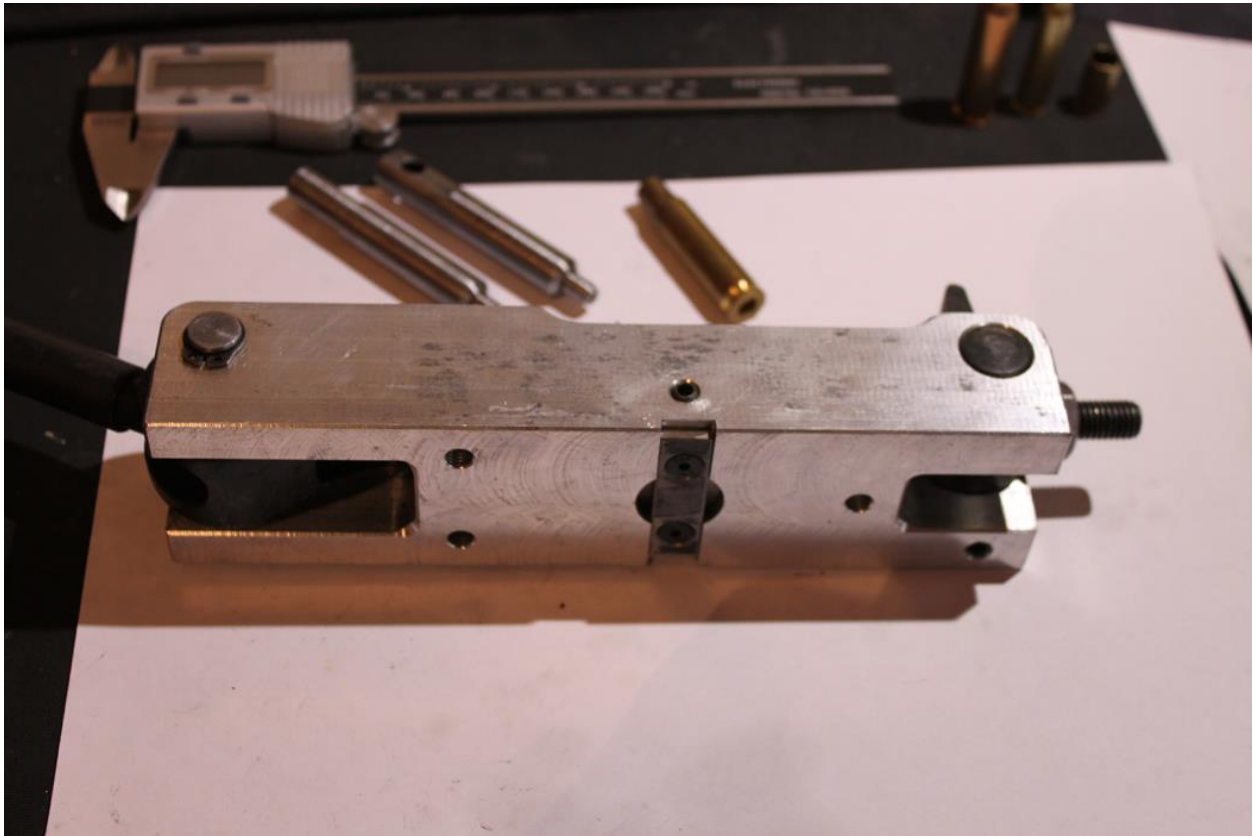
Here I needed to use the Primer pocket swagging press

Pic 7 – The swaging press.



This looks very similar to the dillion press vert it is about 100 times stronger. These tools are known for breaking at the pinned areas front and rear. ASP have identified the weak points on other models and improved on these designs. The main improvements have been the materials , process and the improved CNC machining of the frame. All other models are cast. The ASP products are CNC machined from one of the hardest and strongest Aluminum billet, 7075 aircraft aluminum. The units are also built very solid in order to counteract the weakness experienced in the light weight issues the cast frames suffer from

Pic 8 – the solid structure of the press. A solid base for extreme durability

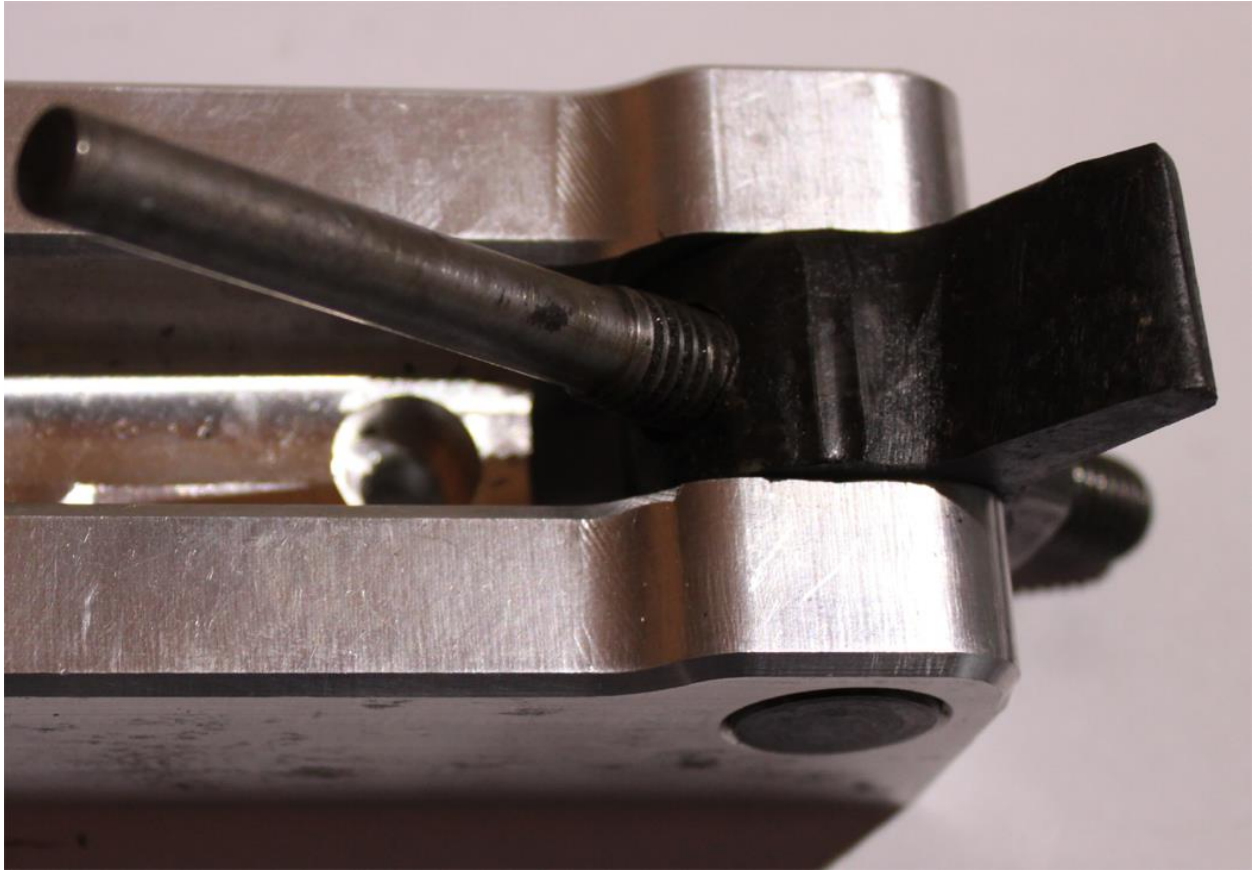


All pins, shafts and the swaging plugs are cnc cut from extra hardened steel. If you try bend this in a vice , you will break the vice before you able to mare their surfaces properly .They are made to endure and exert huge force.

The units should ideally be fixed to a very solid heavy surface to minimize any movement. I temporarily fixed the test unit to my bench with a vice and she worked like a dream. Ideally I will mount it to a steel plate and then in turn mount this to the bench with bolts and nuts .

I did not have a 9mm case guide on this unit, I only had a 308 and 223 guide rod. The 308 seems to work fine on the 9mm cases. Ideally you must change out the case guide which holds the specific caliber cases in the correct position to ensure that the primer lug will meet up correctly with that calibers primer lug

Pic 9 – Case guide rod.

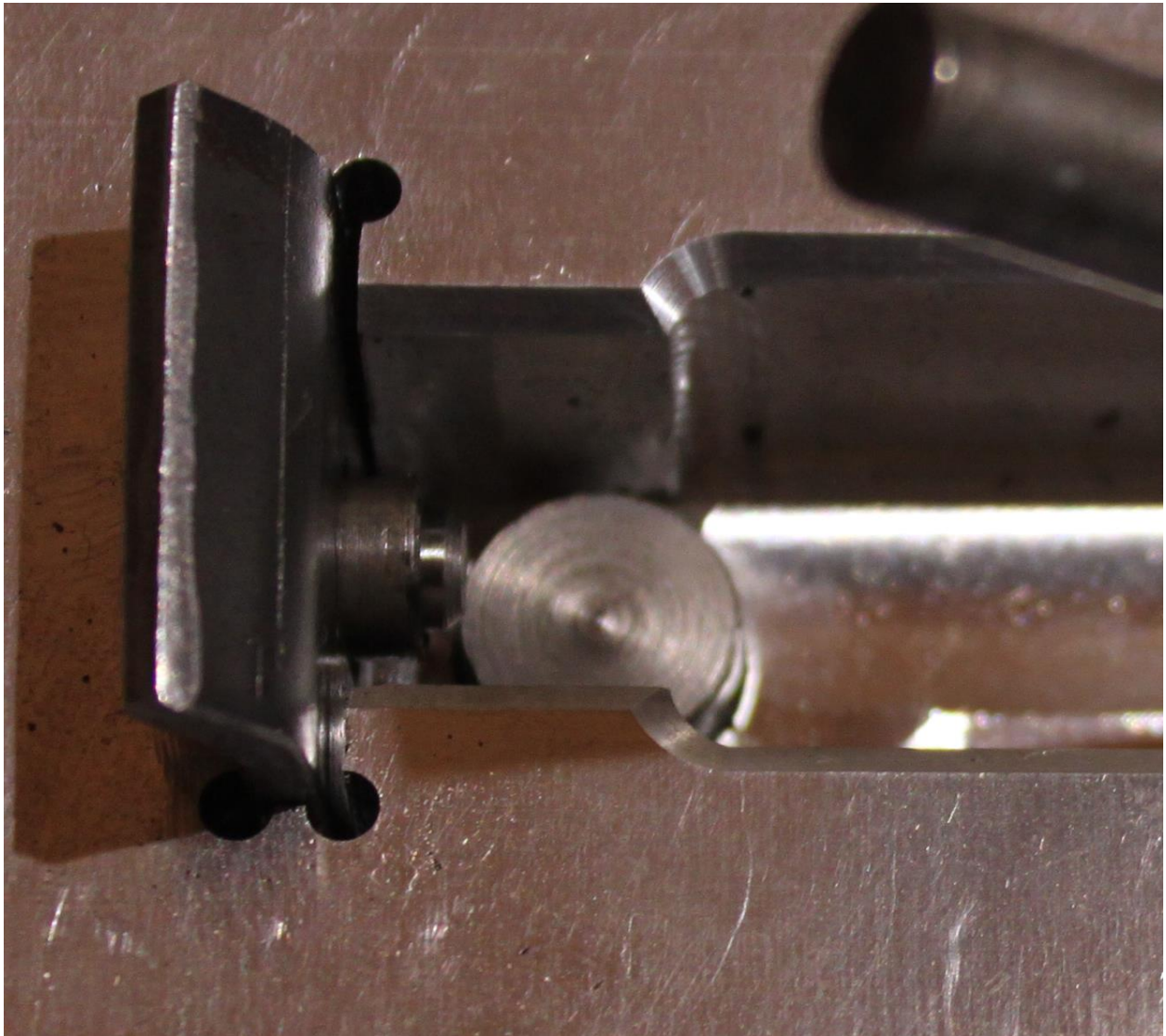


The case guide is easily changed. Unscrew the depth nut from the rear of the guide, then remove the pin holding it to the press frame. You can then easily replace the rod and reinstall it to the frame if you follow the process in reverse. Similarly the primer lug can be removed by removing the pin that holds the handle in position. Snap clips hold the pin in place you can then take the handle off the press and pull the lug free. It too has a pin holding it to the linkage on the arm. Knock this out and pull the lug off. Select the correct lug and replace it on the arm and reinsert it into the frame.

Pic 10 – The primer pocket lugs for the swaging press



Pic 11 – The lug in place, case guide rod and a case fitted on the guide.



Pic 12 Lug in place , case guide rod and case



On the outside of the frame opposite the case body there is a large grub screw this allows you to set the position on the case for the pocket lug for whichever caliber you are working on currently. When the case is in the correct position you can lower the press arm for the lug to enter the primer pocket. Then set the case guide rod screw as tight as possible, slowly work the press arm down. Then release the pressure on the arm and tighten the case guide a little more and apply pressure, Force will be required. Repeat this process until the correct depth and pocket size is achieved. This process will remove any primer pocket crimping. ASP have just completed the first AK 47 swigging presses and accessories. These are however only for the steel primed cases. Likewise the prototype 303 is also undergoing testing. Here you will need to add small little sleeves to the primer pockets to ensure that standard commercial primers will work. The primers are 6,5mm as opposed to the 5 something millimeters of commercial primers.

I am so intrigued by the RND that Ronnie and his team constantly employ to ensure that they bring us product that is relevant to our shooting sports. Their products, allow us means, add value and possibility to our experience of the shooting disciplines we practice.

ASP, Ronnie , thank you for the tireless dedication and investment in our sport, all to improve our experience of it.

Hoor, Hoor !

Written by Codi

