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The Volunteer Defence Corps prototype socket bayonet

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Abstract – Previously known only as a prototype drawing, three specimens of this Western Australian designed bayonet are located and described. A short description of the locale, methods employed, and personnel involved in their manufacture is presented.

INTRODUCTION

In 1939 Australia declared war on the Axis powers and commenced the total mobilisation of its armed forces. In order to free manpower for the armed forces and at the same time augment Australia's internal defence capability, it was felt that an organisation of trained, armed men should be established to assume the burden of guarding strategic communication and industrial facilities. Thus, on June 6th, 1940 the Volunteer Defence Corps (V.D.C.), was established throughout Australia under the auspices of the Returned Soldier's League (R.S.L.). Members consisted of those men who were ineligible for military service due to age limits, health or reserved occupations. In Western Australia, overall command of the R.S.L.V.D.C. rested in Brigadier General A.J. Bessel-Brown. Each of 134 R.S.L. sub-branches were formed into units. There were no established ranks. Initially uniforms were non-existent and arms were broomsticks and anything which could be "wrangled". Earliest uniforms in Western Australia consisted of W.W.1 army uniforms dyed a distinctive green to distinguish these men from the regular forces. Although not recognised by the Army, Western Command provided 2400 "Westley Richards"[1] .310 inch calibre Martini Cadet rifles in October 1940. These rifles, originally purchased in 1908–1911 for the Commonwealth military cadet training scheme, never had an accompanying bayonet. More modern smallarms and ordnance such as mortars and machineguns could not be supplied due to the need to arm the regular forces first. As the war progressed and Japan became more of a threat, the V.D.C. role included training in conventional warfare and guerilla tactics in case of invasion. In April 1941 the Post Office Volunteer Corps and the Rifle Clubs were absorbed into the V.D.C. In June, control of the Corps passed to the Army and the Corps became part of the Military Forces, and, while still voluntary, were subject to military regulations. Western Australia was divided into four Group areas and eventually manned by numbers in excess of 12,000 men. Even though under Army control, arms and equipment remained in short supply due to the war situation. Arms consisted of .310 Cadet rifles with high-velocity bullets, and eventually, light machine guns, 3 inch mortars and converted W.W.1 German medium machine guns. By October 1942, war production had caught up with demand and modern smallarms, equipment and uniforms began to be issued to the Corps[2]. V.D.C. personnel came under enemy fire on occasion and rendered valuable service in many spheres of national defence before disbandment at the end of the war[3].

During the period mid 1940-mid 1942, when arms were almost unobtainable, many talented personnel manufactured in metropolitan and rural workshops, a variety of improvised arms such as Vickers and Lewis machine guns, 3 inch mortars[4] and socket bayonets. It is the bayonets which are the subject of this discussion.

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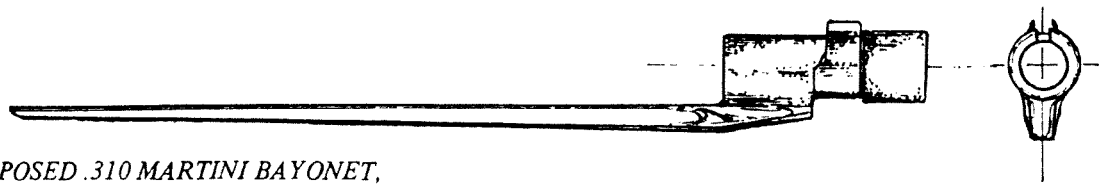
[1] Westley Richards and W.W. Greener of Britain were two of the earliest suppliers of Martini Cadet rifles in the eastern states, and these names became a generic term for this type of rifle. In fact, the most common make of Martini Cadet rifle is the Birmingham Small Arms Co. type. It was the B.S.A. (also of Britain), which was on issue in W.A.

[2] Battye Library, Volunteer Defence Corps 1940–1945, 1903 A/1, files 1–8.

[3] Accounts of actual service and the history of the Corps can be found in *On Guard with the Volunteer Defence Corps*, AWM. Canberra, 1944

[4] WA Museum Archive, Collections, Arms & Armour, U.S.I. Collection. File A.141. Document from Colonel Robinson, V.D.C. Commandant, to Col. George Wieck of the United Services Institute, dated 17 Oct. 1944, offering to procure from the V.D.C. an assortment of "improvised weapons" for Wieck's U.S.I. museum. The weapons include "grenades, compressed-air mortars,.....bayonets for .310 rifles etc. etc."
De Pierres, Paul. *Wheatbelt Warriors*, Privately Published, Wyalkatchem, WA 1993. Reference to the V.D.C. personnel responsible for the manufacture of replica Vickers and Lewis machine guns and a 3 inch mortar is made in this work. The WA Museum holds specimens of a replica Vickers, a replica Lewis and a 3 inch mortar which the author believes are probably these V.D.C. arms, but further research is necessary to be able to confirm this link.

A21–
Length, OA: *14.8 in (397mm)*
Blade: *12.0 in (305mm)*
M.R.D.: *16.0 mm*



PROPOSED .310 MARTINI BAYONET,
SAMPLE 1– A21

Figure 1 The 1942 prototype drawing of the proposed Western Australian V.D.C. socket bayonet for the .310 Martini Cadet rifle. (Drawing reproduced by kind permission of I.D. Skennerton).

THE PROTOTYPE SOCKET BAYONET

Until now, this socket bayonet was only known as one of a series of prototype drawings published in 1986 in a comprehensive reference book on the subject of British and Commonwealth bayonets[5], but it was unknown if any of the bayonets had actually been produced. According to the reference these three drawings, designated A21, A22 and A23 in the book, were submitted by local V.D.C. detachments to Perth V.D.C. headquarters in 1942 as "Bayonet for .310 Martini Rifle, Samples 1, 2 & 3". Samples 2 and 3, were rejected and Sample 1 (A 21, see Figure 1), was forwarded to Melbourne headquarters on June 26th 1942, as suitable for production. Made of spring steel, the bayonet was costed at 6/8d, and a request that the first 10,000 be sent to this state accompanied the drawings sent to the east. In late July a response was received to the effect that an eastern states design had already been chosen for production[6]. The design chosen is not known, but the response is thought to have coincided with the breakthrough in supplying the V.D.C. with modern smallarms, bayonets and other equipment and ordnance as Australia's war production had now expanded to meet all supply demands. It is probable that the availability of modern arms ended any further need to produce improvised weapons of any kind, and consequently the proposed V.D.C. bayonet production was abandoned.

Description

The author was aware of the prototype drawing, and was fortunate to locate an example of a socket bayonet fitting the drawing's characteristics in the WA Museum collection (T.882), and later located two more; one in the Army Museum of Western Australia collection (104/78), and another in a private collection.

The first of these to be noted (WA Museum, T.882, see Figure 2), appeared to be identical to the prototype drawing A21 in all respects except being 22 mm shorter than the stated overall length. In a practical test, it was found that the bayonet fitted perfectly on a sample .310 Martini Cadet rifle, but not on any other comparable type of rifle.

The bayonet is the conventional triangular section spike blade welded to a tubular socket which has a manually operated, rotating locking ring. The blade is a 320 mm long section of 12 mm diameter hardened steel rod, which has been ground or linished to produce three equal width flats tapering to a "clipped", or truncated, tip. The blade, whose three edges are sharp enough to cut, has been welded (possibly arc welded) to the socket. The socket consists of a 70 mm long section of 23 mm diameter steel tubing, which has been turned down to 20 mm to produce a rebate for the locking ring to bear against. The socket tube has been drilled or reamed out to an internal diameter of 16 mm. The locking ring is 20 mm wide, of thin flat sheet steel bent around the diameter of the socket, but is left open at the top to allow the foresight block of the rifle barrel to pass. The open topped "O" thus formed has a pair of projecting "ears" which form the thumb pieces to facilitate the locking and unlocking operations. All parts of the bayonet exhibit evidence of hand filing and the bayonet appears oil blackened. The bayonet bears no markings and is not accompanied by a scabbard.

The specimen differs from most conventional socket bayonet types in that the slot cut in the top of the socket to accommodate the foresight block of the rifle barrel, is straight (not the usual zig-zag), and the manually operated spring steel locking ring which rotates to lock against the rear of this sight block, is open at the top, rather than the usual

[5] Skennerton I.D. & Richardson R., *British & Commonwealth Bayonets*, Skennerton, Margate, Qld. 1986. Pp.283 – 284
[6] Ibid. P.284

Figure 2 The V.D.C. socket bayonet for the .310 Martini Cadet rifle. Compare this example with drawing A 21 in Figure 1. (Photo K. Brimmell, Western Australian Museum).

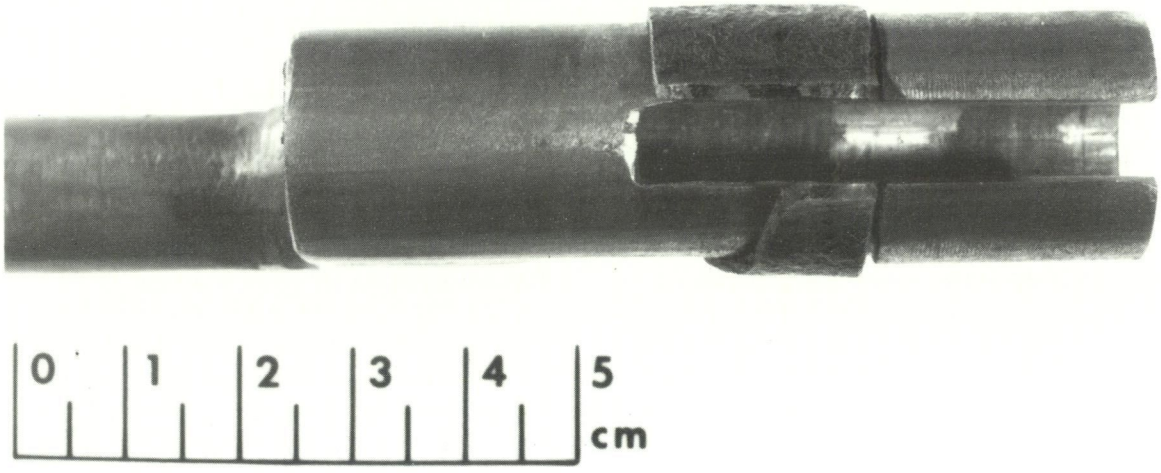


Figure 3 Details of the socket, sight slot and locking ring of the bayonet in Figure 1. (Photo K. Brimmell, Western Australian Museum).

closed type (see Fig. 3). Another characteristic of this bayonet is that the rear end of the socket rests against the metal nosecap of the rifle's forend and is held firmly against the nosecap by the rearward pressure as the locking ring presses against the rear of the foresight block. The foresight block does not come into contact with the closed forward end of the slot. The effect of this arrangement is that the forend provides firm support for a forward thrust of the bayonet, and the foresight block provides support for the withdrawal of the blade. Most conventional types of socket bayonet lock exclusively to the foresight block, which must bear all the forward and rearward stresses when in use.

DISCUSSION

The discovery of this bayonet demonstrates that an example existed, matching the V.D.C. prototype drawing in all except minor dimensional details, but the discovery did not definitely clarify the question of whether this particular bayonet was indeed made by the V.D.C. A study of the Western Australian Museum records showed that this bayonet was donated over 30 years ago by a private citizen with no apparent connection to the V.D.C., and who could not now be traced. As has been referred to in footnote 4, a 1944 document from the V.D.C. to the United Services Institute, offering to their collection "bayonets for .310 rifles" (which was accepted), is evidence that a type of V.D.C. bayonet for the .310 Martini Cadet rifle existed, but the bayonet is not in the Western Australian Museum collection[7]. Although promising, further study was needed to determine conclusively the origins and production details of this bayonet. After informal inquiries among collectors and institutions, the author was able to examine two more specimens of this bayonet. The two subsequent bayonets were determined to be

[7] Prior to the transfer of the U.S.I. collection to the Western Australian Museum, U.S.I. members were permitted to retrieve personal property, and some items listed were consequently not included in the actual transfer. As the records of the time were confused, it is also possible that this bayonet (T.882), is actually the V.D.C. bayonet in question, but was inadvertantly attributed to the recorded donor.

Table 1 Specifications of the V.D.C. Socket Bayonet (in mm).

SOURCE	Overall length	Blade Length	Blade Flat Length	Blade Thickness	Socket Length	Socket Slot Length	Muzzle Ring Diameter
Drawing	397	305					16
WA Mus	375	300	260	12	75	48	16
Arm Mus	345	272	175	12	73	48	16
Private	343	273	200	12	70	48	16

exact replicas of the Western Australian Museum bayonet in all respects of shape, components, function, fabrication and finish. Dimensions of the socket in respect of muzzle ring diameter, sight slot length, rebate position and locking ring width are uniform, indicating that they were all designed to fit the .310 Martini Cadet rifle, and in fact did fit these rifles when tested. The exception to the above is found in the differences in the lengths of the flats on the blades and the lengths of the blades themselves (see Table 1). (One would perhaps expect to see discrepancies in the grinding of the blades, occasioned by hand production techniques). As with the Museum specimen, there was no connection with the V.D.C. recorded in the provenance of these two most recent specimens.

After placing an advertisement relating to this research in the local newspaper, the author received a number of responses from former V.D.C. members who had served in various detachments. Only two respondents had any knowledge of improvised bayonets being used in the V.D.C. Significantly, these two respondents were the only ones to serve in the Midland Junction detachment. Mr Harry Gratte, a former employee of the Western Australian Government Railways (W.A.G.R.), at Midland Junction during the war, was a member of the mounted section of the Midland detachment of the V.D.C. Mr Gratte described a single bayonet he had seen attached to a .310 Martini Cadet rifle standing in a rack at the Bushmead rifle range during a V.D.C. firing practise in 1942. Without prompting, Mr Gratte described the bayonet as "about 10 inches (255 mm) long, with a locking ring and a tri-form blade". Although seen in the Midland V.D.C. detachment ranks, Mr Gratte had no memory of whose bayonet it was or of any such bayonets being made at his place of work, the Midland Junction Railway Workshops. Mr Gratte left the V.D.C. in early 1943, at which time they still had the .310 rifle[8].

The second respondent, Mr Frank De Catania was an apprentice fitter at the W.A.G.R. workshops in Midland Junction during the war and as such was in a reserved occupation and could not enlist in the A.I.F. He was in the Midland detachment of the V.D.C. also, and described how in 1942 he had fabricated "a number of socket bayonets for the V.D.C at the Midland workshops". Without prompting, he accurately described the bayonets as having "triangular blades about nine or ten inches long (230–255 mm), with a socket and locking ring". Mr De Catania could not remember exactly if he worked from drawings, but said he made "a number; two or three, under supervision or to direction". The spring steel locking ring was shaped to the socket by him, "but tempered in the blacksmith shop". When shown photographs of the bayonet, (Figures 2 & 3), he positively identified the bayonet as being the type made at the workshops during the war. In addition, Mr De Catania recollects that "a few" of the men, including himself, then made their own unofficial versions of the bayonet. Mr De Catania's version of the bayonet was identical to the bayonets described here, except that he made his blade from a triangular file which he annealed, then ground to shape before rehardening. Mr De Catania made his bayonet because he felt his .310 rifle was inadequate when he was on night sentry duty guarding the V.D.C. headquarters behind the Midland Junction Town Hall[9]. Neither respondent could recollect any further details about the bayonets and no subsequent respondents were forthcoming.

CONCLUSION

The recollections of these two gentlemen are of great value as they positively identify the bayonets as being for the .310 Martini Cadet rifle and also link them to the V.D.C., a link that could not previously be established. The archival evidence given in the reference book is thus confirmed. All three bayonets exhibit identical shape, components, fabrication techniques, function and finish, suggesting that they were all made together as a batch or to a pattern, which tends to confirm Mr De Catania's description of making the bayonets under direction[10]. The evidence also confirms that

[8] Conversation with Mr Harry Gratte of Caversham (19 September 1995).

[9] Conversation with Mr Frank De Catania of Gosnells (19 September 1995).

[10] The fact that all three bayonets have been in collections for up to 20 years prior to the publication of the prototype drawing in 1986, precludes any possibility that the bayonets have been fraudulently manufactured since the drawing was published.

these bayonets were made at the W.A.G.R. workshops at Midland Junction. Because of the time of manufacture (1942), and the small number made, the author is inclined to the view that these bayonets were made as samples or prototypes in connection with the proposed V.D.C. bayonet manufacturing proposal of June–July 1942. The "issue" of these bayonets was probably confined to a few personally manufactured examples such as Frank De Catania's.

In the sense that these bayonets are substantially hand made and finished from rudimentary materials, they can be considered "crude", but in that they are of absolute functional simplicity, requiring only three parts which can be made and assembled in any small workshop by unskilled workers, they are a minor masterpiece of successful technical design. These bayonets form an important historical record of Western Australia's wartime local volunteer defence effort.

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