THE FIRE-FOWER OF THE INFANTRY SECTION.

1. Increasing firepower.

The limit to the fire-power of the section is set by three factors:-

- (a) Weight of weapons and ammunition that can be carried.
- (b) Accuracy of directing fire (= accuracy of shooting and locating the target).
- (c) Size of the section.

The production of lighter weapons and ammunition is being considered by the arms designers; it is a long term policy and outside the scope of this paper. The improvement of the standard of shooting is primarily a training matter. It has been discussed earlier in the paper, and will not be considered further. Location of the enemy has always presented great difficulties, and certain aspects of the problem are being considered by AORS 6. And lastly, the size of section has in the past been limited by the marpower shortage; it will not be considered in this paper.

There remains one, and perhaps the most important, way of increasing the section's firepower - to devise new methods of allotting and using existing weapons, so that the section is more efficiently fitted for the job it has to do. The remainder of this paper is concerned with such improvements.

2. The present section.

The present section consists normally of 10 men, but in battle this number is liable to be considerably reduced. The section divides into 2 subunits, the Rifle and Bren groups (or 2 Rifle groups and 1 Bren group):-

Rifle Group.

Bren Group.

NCO 1/c Section M.C.

2 1/c Section Rifle.

6 Riflemen.

Rifle. No. 1

Rifle.

3. The principle of two groups (Fire and movement).

The principle of two (or three) groups within the section is widely accepted. It is the basis of fire and movement as taught, enabling one group of the section to advance, covered by the other. Whether in practice events always work out thus, is more than doubtful, particularly in the type of deliberate set piece attack now in favour. It may be that the section is really too small to be split into two groups, and that fire and movement should only start on an intersection level. It is not proposed to discuss this matter in the present paper, but whether Rifle and Bren groupd are accepted or not, the remarks that follow apply equally in the comparison of the Bren and Rifle elements of the section. In accordance with present teaching, the comparison is actually made of Rifle group and Bren group.

No. 2

4. Comparison of firepower of Rifle and Bren group.

A comparison of Bren, Rifle and Sten under range conditions has already been made. From this it appears that, for ranges up to 300 yards:-

1 Bren is equivalent to

Rifles.

1 Sten " "

Laurier Military History Archive I CAON00411 MG-0002-4-47-38-7 Laurier Centre For The Study Of Canada, Wilfrid Laurier University

It is widely agreed that the Rifle is in fact practically never used at ranges greater than this (IWDC and others).

It has also been shown that in battle a variety of new factors come in, all of which tend to give the advantage to automatic weapons, so that:-

1 Bren may be equivalent to

Rifles.

For neutralising again, it has been suggested that automatics are superior to Rifles, probably because of the large number of bullets they can fire, possibly also because of the rapid even stream of bullets they produce.

It is thus apparent that the Bren group of 3 men, has a fire power equal to or greater than the Rifle group of 7 men. Nevertheless, two points are usually quoted in favour of the Rifle group, one that it is more mobile, and the other that it provides the necessary number of bodies (= bayonets) for close quarter fighting. Both points are important. The Bren group is not as mobile as the rifle group, though it is not certain that this matters so much in a war of deliberate attacks rather than infiltration. The reasoning on the second point is not entirely logical, since the Bren group usually takes part in close quarter fighting and the final rush, while the density of men on the objective is mainly a matter of frontages.

It is evident that the Rifle group is not contributing to the firepower of the section in proportion to their numbers. The obvious course, therefore, is to arm them so that they do effectively increase the section's firepower. Two possible methods, both relatively simple, are suggested:-

- To re-equip the rifle group with Stens, leaving only one or two riflemen to act as section snipers.
- (2) To have a section of 2 Bren groups, each to consist of 5 instead of the present 3 men. One or two men to act as section snipers, and the remainder to be equipped with Stens as in (1).

We will consider these two suggestions in turn; with their implications.

5. Rifle group with Machine Carbines.

This suggestion arises directly and logically from the discussion in the earlier part of the paper. The argument is briefly as follows:-

- The Bren group of 3 men has a fire power equal to and possibly considerably superior to the Rifle group of 7 men.
- One Sten, on the range has the same chance of hitting a man standing still in the open at 200 yards, as Rifles. In battle one Sten may, because of various factors, be equivalent to Rifles.
- J. In attack targets are inconspicuous, and the chances of hitting are very small anyway, at ranges over 100 yards. At ranges less than this, the tempo of the battle will have speeded up, and the slow loading and slow firing rifle is at a great disadvantage against the quick firing automatic.
- 4. In defence targets may be visible at greater ranges, several hundred yards. But the chance of hitting at such ranges with rifles is very small, and in any case, fire is usually withheld until the enemy reaches close

quarters, in order to maintain concealment and surprise. Then once again the quick firing automatic will be at an advantage.

5. The Sten is not far inferior to the Bren in accuracy up to 300 yards. Because of its high rate of fire, it should prove a good neutralising weapon, and at close ranges it is already acknowledged to be an excellent weapon.

A few further points need some discussion:-

- (a) Weight. The Sten weighs only $6\frac{1}{2}$ lbs. Magazines of 32 rounds only $1\frac{1}{2}$ lbs. For a weight equivalent to a rifle and 50 rounds, the Sten and 4 magazines (128 rounds) could be carried.
- (b) Other uses. The advantages of a Machine Carbine for House and Street fighting, Patrols, particularly for Night, Smoke fighting and so on, need no emphasis.
- (c) Bayonets. The replacement of Rifles by Stens deals a blow to the bayonet at first sight, but this is not so. Great controversy rages round the bayonet, and it is not proposed to discuss the matter here. With reasonable certainty it may, however, be said that:-
- (1) The bayonet can have considerable morale effect.
- (2) Bayonet charges are not frequent.
- (3) The bayonet is still less often actually stuck into the enemy.

A bayonet has been designed for the Sten, but was rejected, chiefly, it is understood, on the grounds that the Sten was not robust enough. But in view of (3) above, is this a real objection? If on one of the rare occasions that the Bayonet is used on the enemy, a Sten becomes spoiled, the cost of replacement of the Sten is negligible. It is suggested that the bayonet should be useful as well as decorative and threatening, so that it might be made to form a useful knife apart from the gun.

(d) Snipers. We have so far talked as if all rifles should be replaced. This is doubtful. We have said that the marksman or sniper can produce results far and away beyond the capacity of the ordinary man. It would clearly be foolish to take away the rifles from such men, and give them Stens. It is, therefore, suggested that 1 or 2 men per section retain rifles, and be given special opportunities for practice, so that they become in effect section snipers. Any long range targets which turn up can then be dealt with by these men, with probably greater effect than by 7 indifferent rifle shots.

6. Section with two Bren groups.

This suggestion arises similarly and directly for the arguments enumerated in section 6, paras. 1 - 4. Instead, however, of relying on a number of Stens to increase the firepower of the old Rifle group, it introduces a second Bren. This increases firepower very greatly, but with a Bren gun the trouble is always the ammunition supply, and it is this point in particular that we must examine carefully.

The official ammunition allotment for the Bren is as follows:-

2 i/c No. 1 No. 2	ı	4 Mags. 4 Mags. 5 Mags.
Each of 6 Rifle men.		2 Mags. + 50 rounds.
Total		25 Mags. (700 rounds) + 300 rounds.

In practice, because of the considerable weight, and the shortage of magazines, this quantity of ammunition is seldom carried, and at a recent meeting of S. of I. and S.A.K. Hythe, it was agreed that the Riflemen would only carry 50 rounds each, while the Bren group would carry about 15 mags., 1.e., 420 rounds in the Bren group, and 300 in the rifle group.

A section of two Bren groups, will presumably have 5 men in each Bren group. If the men, other than the Bren gunner himself, still retain rifles, the ammunition position might be as follows:-

 2½
 4 Mags.

 No. 1
 4 Mags.

 No. 2
 5 Mags.

 Rifleman
 2 Mags. + 50 rounds.

 Rifleman
 2 Mags. + 50 rounds.

17 Mags. + 100 rounds.

This is roughly what is carried at present, and it should, therefore, be quite possible to incorporate two adequately supplied Bren groups in the section. If, on the other hand, some or all of the rifle men are changed to Sten gunners, it should be possible to make free 3 lbs. of carrying capacity (1 rifle + 50 rounds = 12 lbs. 1 Sten + 2 mags. = 9 lbs.), which might allow a further 200 rounds to be carried for the Bren, while conferring the other advantages already enumerated in the last section. It might also be desirable to retain one or two riflemen as before, to become section snipers.