NOTES ON TACTICS FOR TANKS.

1. For the sake of clearness it may be as well to recapitulate the present organisation and capabilities of the machine used by the Heavy Section MGC.

Organisation. Headquarters and 6 Companies each of four sections of 6 Tanks with one spare tank and crew per section, workshops sections, transport etc.

Power of Tank Rate of travel (maximum) 4 miles per hour forwards or backwards. It can cross gaps or trenches 10' wide, banks 5' high and can ascend and descend slopes not exceeding 1 in 1.7. It can tread through wire entanglements and woods of small trees, or copses, but cannot pass through closely planted orchards, rivers, canals. A weight of 10½ lbs per square inch is distributed by the Tanks on the surface of the ground so that the weight brought on road culverts is not excessive.

Armament. 75, 6 pdrs & Vickers and Hotchkiss, 75 Vickers and Hotchkiss.

2. Owing to the limited number of Tanks that will be available (150) every endeavour should be made to evolve a simple form of tactics and any attempt at a complicated system of manoeuvre, in mass, should be avoided and the handling of the individual Tank on the battlefield should be reduced to its simplest elements.

It would not appear alone desirable but even necessary that the whole unit (Heavy Section) should be employed in the same zone of operations and should operate, under its own commander, in accordance with its pre-arranged scheme of attack.

3. It is generally admitted that the disadvantages from which our infantry at present suffer in the attack are due to

(a) The difficulty of surmounting obstacles.
(b) Losses due to hostile machine gun fire.

Both these disabilities can be overcome by Tanks, either by their crushing power or by their gun fire; they should therefore ensure that our infantry come to close quarters with the enemy as soon as possible.

The Tank itself presents a large target to hostile artillery and for this reason alone full use should be made of its comparative mobility so as to reduce its chances of direct hits. Steps should be taken to render the Tanks as invisible as possible.

4. It may be accepted as an axion that in moving the Tanks from billets or rendezvous to "points of assembly" advantage should be taken of the hours of darkness so that it would appear that an attack timed for dawn should be suitable as far as the Heavy Section is concerned. The selection of the precise route to be followed and the method by which Tanks are to moved to a position just behind out first line requires care and forethought and time devoted to precious reconnaissance is essential. The line of advance of each individual Tank will probably have to be marked with tracing tape. The selection of the precise position of each Tank behind our front line trench appears to depend on the result of reconnaissances; it is desirable that the Tank should drive as straight as possible across "no man's land" from its assembly position, although cases may arise in which one Tank may possibly be able to deal with two separate hostile emplacements. Another factor to be considered in allocating the positions of individual Tanks is to being them as close to our front line trench without disturbing any existing arrangements in our trench system. It appears that it inadvisable to drive the Tanks into previously prepared "Pits" owing to the difficulty of dealing with the earthwork in proximity to the enemy and in view of his flying machines.

It may be accepted that an average distance apart of one Tank from its neighbours is from 150 – 200 yards; so that, at starting, the Heavy Section would occupy a frontage of 12 miles. This is an important point to remember in synchronising the advance and a definite and precise time should be laid down for starting engines and moving forward to attack.

5. The argument as to whether the Tanks should be used employed in one general line or by "driblets" appears to require no elaboration: in order to get the full value of the machine combined with the element of surprise it would appear unwise to disseminate the force and power of this weapon. Were the machines available in larger numbers, no doubt a more suitable form of tactics could be devised; at present extreme simplicity seems to be the best method of handling a somewhat complicated engine of war.

6. The artillery bombardment of the hostile trenches might be intensified gradually until the time selected for the attack - - this postulates that the international wire in no man's land will have to have been sufficiently cut to enable an advance to be conducted through it; in any case the Tanks themselves will "roll out" a path in such portions of the entanglement as lie in their line of advance.

Owing to the protection from enfilade fire which the Tanks themselves provide it would probably be better to combine the advance of our infantry with that of the Tanks themselves and it may be anticipated that the German front line trench will be reached without experiencing any very great difficulty – from this point it should be the duty of the Tanks (each acting on the order of its

individual commander) to move straight forward with the object of destroying the intermediate lines of wire and blocking main communication trenches (crossing and recrossing them where necessary). To break down the wire entanglements it will probably be advisable to move through it diagonally so as to destroy as great a width as possible. The 6 pdr guns can probably now be used with effect against hostile guns which our machine guns will find suitable targets in the German first line system of trenches.

It is, however, important that the Tanks keep well ahead of our infantry and also keep on the move. It should be regarded as an invariable rule that no Tank moves out of the line to go to the assistance of another which is temporarily in difficulties; each tank commander must rely entirely on his own resources to extricate his machine, During the progress of the Tanks, through the German front line system, rough dressing should be kept to, otherwise there will be unnecessary confusion and wasting of fire.

7. The principal points to make for, on arriving at the rear (or reserve) trenches, are the ends of the communication trenches-- it cannot be hoped to block all these, but from following those which, from nomenclature or other reason, appear to be important an opportunity may be afforded to deal with reserves which are being pushed up. It is not the intention that Tanks should be immobilised in the process of blocking trench but, whilst keeping on the move, should endeavour to follow the general line of the communication trench enfilading it where possible.

8. It is most inadvisable that any pause should be made in the advance once the Tanks have passed over (or through) the German font line -- it is more than probable that they will come under heavy artillery fire and no attempt should now be made to keep line or travel at equal speed. Tank commanders must realise that success depends on their own initiative and rapidity of decision -- there should be no hesitation in opening fire with 6 pdr guns, provided the range is suitable, on isolated houses, groups of buildings, haystacks, in fact anything capable of holding a hostile machine gun. The general system of attacking the German second line will not differ greatly from that previously described but it will perhaps be advisable to turn the flank Tanks of the companies inwards to move through unbroken wire in front of the fire trench. – if each of these Tanks moves on a zig-zag course for <u>half</u> the depth of the wire the two Tanks between them will “roll out” the entanglement 30’ wide. The Tanks concerned with then have changed places in the line.

9. A more difficult proposition is the method of dealing with strong points, closed works etc. .Owing to the lack of intercommunications between tanks, there may be a waste of force by too many Tanks moving towards the same objective or one Tank may be required to undertake the work of two.

There appears to be no alternative but to leave the situation to be left to each Tank commander who must remember that Tanks alone will not win the battle and that the first and sole duty of the Heavy Section is to help the infantry advance. As much preparatory training in the attack on isolated points, detached villages etc as is possible will be given.

10. In the proceeding paragraphs, practically no reference has been made to the action of our artillery; it is however hoped that heavy artillery (guns and howitzers) will be available in the zone in which the Tanks are operating so as to neutralise as far as possible the chief disadvantages under which Tanks work – namely vulnerability from H E Shell.

11. From such observation and deduction as it has been possible to make up to date of writing this memorandum, the following appear to be important points:-

(a) Economy of 6 pdr ammunition in the early stage of the attack -- all of it and probably more will be required later on.

(b) Tanks should be driven as straight as is inconsistent with "rolling out" wire and blocking communication trenches.

(c) Line must be kept at first so as not to mask any Tanks.

(d) The Tank commanders will, prior to the attack, have to be instructed by the OC Company as to what points they must make for after the first system of trenches is crossed. A general idea, given from the map may and, and probably will eliminate some doubt and confusion.

12. Mechanical addition. A steel box (bullet proof) to be carried on the tail guide bracket of each machine -- box to carry bandoliers of SAA for infantry (say 2 dozen) , 24 Lewis gun discs [magazines] filled 50 grenade -- total weight, box included, perhaps 250 lbs (N.B. The tail has lifted a weight exceeding 1,000 lbs). This reserve of ammunition may be the saving of the situation and is readily accessible for use by the infantry.

13. The writer is of opinion that it will be impossible for the Tank commander (officer) to control the fire and indicate targets other than by working by "director." Should he wish to issue an order as to engaging a particular target, he must do so by writing it on a slate or a paper block – e.g. he observes a haystack at a bearing of 42, he wishes to fire 3 rounds 6pdr at this objective from his starboard gun, all he need do is to write "S.42 3" meaning "Starboard gun, bearing 42, 3 rounds", or the order could be varied to mean "S.42 3 rounds at 5 second intervals" etc. (Details of this nature can only be settled when the proficiency of the crews has been tested.)

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Bernersfield Camp
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