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REPORT NO. 168

HISTORICAL SECTION

CANADIAN MILITARY HEADQUARTERS

The Organization of First Canadian Army

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 Authority: DHD 3-3
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 Date: SEP 18 1986

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INTRODUCTION

1. This report covers the planning of the composition of First Canadian Army from its inception early in 1942 until it started operations. It concentrates on the actual composition of the Army as planned, the way it was to be organized, and the main outlines of the organization of the various arms of the service. The major changes introduced both in the composition of the Army as a whole and in the individual types of unit are included, but the factors influencing these changes can often be only briefly indicated. No attempt has been made to deal with changes introduced during the course of operations. These were as a rule closely related to those operations, and must be considered in the light of the conditions which brought about their adoption. They form more properly a part of the operational narrative. The more important changes have, however, been noted at the end of this report. As the Canadian Army did not enter action as a single force, there is no single date which can be given as marking the end of the period covered. In general the story is carried down to June 1944, though there are references to later events, but the particular changes introduced in Italy prior to that date have not been covered.
2. This report deals with the planning and the standard details of organization. The companion picture of the implementing of the plans and the gradual accumulation of units and formations overseas may be found in Reports Nos. 59, 85, 110 and 122. The principal source has been C.M.H.Q. files, although use has been made of other files and documents in the possession of the Historical Section, C.M.H.Q.
3. The period covered, January 1942 to June 1944, was one of comparative quiet for the armies in the United Kingdom. By the diversion of the German armies to Russia the threat of invasion had greatly lessened. Attention could now be devoted to planning and preparing for an assault on the continent. Indeed Headquarters First Canadian Army was specifically freed from other responsibilities for this purpose (C.M.H.Q. file 1/Cdn Army/1: Letter, G.C.C.-in-C. First Cdn Army to Director of Staff Duties, War Office, 19 Apr 42). It was a period of small raids, culminating in August 1942 in the raid on Dieppe by a large force from the 2nd Canadian Division. Apart from the possibility of other such raids, there was little expectation that the Canadian Army would be required for operations until a major assault on the continent was launched at a date still to be decided by the Combined Chiefs of Staff in Washington. Such conditions gave the First Canadian Army time to develop to the best advantage.
4. The principal theatre in which British forces were engaged in the first half of this period was North Africa. The lessons of that theatre had made themselves felt in British organization by the end of 1941. The following year was one of experiment and overhaul at home. It was not without effect on the Canadian Army that the development of a self-contained force took place at a time when British organization was being extensively revised. It was an obvious opportunity for distinctively Canadian developments.
5. But while the force of world events had their influence on the development of First Canadian Army, the story covered by this report will appear largely as if isolated from outside events. It is a story of planning for a future that long remained distant. Changes were made and

establishments adopted based on the cumulative experience from all available sources. It was a deliberate process that was not easily diverted by, although it did not ignore, the contemporary happenings in other theatres.

THE FORMATION OF FIRST CANADIAN ARMY

6. Prior to 1942 the Canadian Forces Overseas had represented a gradual growth of units and formations, which were envisaged as forming part of a British force. As their number grew they had been concentrated in a Canadian Corps, but that corps was itself part of a larger military force. The line of communication and base troops in particular were mainly British. During 1941 there had been an increase in Canadian units designed to serve in rear areas, but in essence the Canadian forces had to be regarded as part of a British Army.

7. But by the end of 1941 it was apparent that the Canadian forces were becoming too large for inclusion in a single corps. There were four divisions and an independent army tank brigade in the United Kingdom; another division and a second army tank brigade were training in Canada for despatch overseas. Further, there were already overseas a number of units that would normally be grouped in higher formations or base areas; more were planned for the coming year.

8. The proposed Canadian Army contribution for the Field Force which was being planned as F.F.C. 36 in 1942 was:

- (a) Three divisions.
- (b) Two armoured divisions.
- (c) Two army tank brigades.
- (d) Corps troops for a corps of three divisions and two army tank brigades.
- (e) Corps troops for an armoured corps of two armoured divisions.
- (f) Army and G.H.Q. troops for a corps of three divisions and two army tank brigades and a corps of two armoured divisions.
- (g) Some line of communication and base units.

The details of units included in this proposal are shown in Appendix "A" (Ibid: Proposed Composition, Canadian Army (Field Force) in the United Kingdom, 16 Jan 42).

9. The question was raised as to what sort of headquarters was intended to control this force. In December 1941 during a discussion between Lt-Gen Paget, C.-in-C., Home Forces, Lt-Gen McNaughton, and Lt-Gen Crerar, General McNaughton expressed his preference for an army headquarters (Ibid: Memorandum of P.A. to Lt-Gen McNaughton, 27 Dec 41. See also Chap XIII, Preliminary Narrative, History of the Canadian Military Forces Overseas). He reported this to Ottawa the following day:

In our discussions yesterday General Paget C.-in-C. Home Forces reiterated views previously expressed to me by his predecessor Brooke now C.I.C.S. that on account of the size of Canadian Forces in the United Kingdom we should now provide an Army Headquarters.

(Ibid: Tel 2496, DOMINION to EXTERNAL, for Halston from McNaughton, 27 Dec 41).

The following reply was received:

This involves a somewhat imposing expansion in

overhead and did not understand that it had been advocated by you. Understood you proposed to put forward recommendation for increase of corps staff to permit of more attention being paid to L. of C. and ancillary units.

(Ibid: Tel GS 2105, DEFENSOR to CANMILITRY, from Ralston to McNaughton, 30 Dec 41).

The matter was discussed during the visit of Lt.-Gen. McNaughton to Ottawa at the beginning of 1942. Approval was granted in March, and the announcement of the formation of First Canadian Army was made on 6 Apr 42 (Ibid: Tel GSD 602, DEFENSOR to CANMILITRY, 21 Mar 42; Tel GS 158 DEFENSOR to CANMILITRY, 4 Apr 42).

10. The plan for the formation of headquarters First Canadian Army was discussed at a meeting in Lt.-Gen. McNaughton's office, Headley Court on 3 Apr 42. Lt.-Gen. McNaughton explained that he planned to set up Army H.Q. in three phases:

- I. A nucleus staff would be formed under the co-ordination of D.A. & C.M.G. (Maj.-Gen. G.R. Turner) consisting of himself, the Chief Engineer (Maj.-Gen. C.S.L. Hertberg), the Chief Signals Officer (Brig. J.E. Genet), and a minimum of other staff officers and clerical personnel required for initial organization. This phase was to be completed by 20 Apr 42.
- II. Army H.Q. to be completed to about half the final establishment by the middle of June.
- III. HQ. 2 Cdn Corps would be organized and brought up to establishment by about 1 Jul 42.

(Ibid: Memorandum of Meeting, 3 Apr 42: see Historical Officer, Report No. 69).

11. These phases were carried out as planned. The first two phases were completed by 10 Jun 42, when a fourth phase towards the completion of Army H.Q. was begun.* This phase, which brought the establishment up to about three-quarters of its total strength, had no date fixed for its completion. Numerous amendments were made to the establishment during the succeeding months as the various branches had a chance to examine their needs. But the completion of the establishment was left until 1943.

12. The full establishment on which this development was based was that for a British Army Headquarters (C.M.H.Q. file 5/Army H.Q./1: War Establishment, Headquarters First Cdn Army, effective 6 Apr, 20 Apr, 10 Jun 43). Only minor deviations to meet specific Canadian needs were introduced (Ibid: D.A. & C.M.G. First Cdn Army to Senior Officer, C.M.H.Q., 17 Jun 42; also C.M.H.Q. file 1/Cdn Army/1: Senior Officer C.M.H.Q. to Secretary, Department of National Defence, 1 May 42). The most notable deviation from the British organization was the inclusion of the Military Secretary's branch under the Adjutant-General's branch. In the British organization this branch, dealing with officer's personal services, is responsible directly to the Army Commander in conformity with British practice at the War Office and all headquarters above the corps level.

* Headquarters, 2nd Canadian Corps was not formed until 14 Jan 43. (G.O. 281 of 1943).

The Canadian practice was to place this service under the Adjutant-General's branch throughout, and it was obviously desirable in the interests of consistency to follow Canadian practice at Army Headquarters, (C.M.H.Q. file 1/Cdn Army/1: Memorandum of Meeting held in the office of D.A.G., C.M.H.Q., 21 Apr 42.)

THE ARMY PROGRAMME FOR 1942.

13. Meanwhile discussions had been carried on with the War Office over the requirements for a Canadian Army. The proposals outlined above (para 8) were submitted for comment. For divisional, corps, and army troops they followed closely the British organization. But there was some War Office criticism regarding G.H.Q. and L. of C. troops. The two main points were :

- (a) The provision of anti-aircraft regiments for army and G.H.Q. troops was very small. In place of one heavy and one light anti-aircraft regiment, they proposed five of each.
- (b) There were serious deficiencies in the number of line of communication units proposed. It was pointed out that if the Canadian Army was to be a completely self-contained force it should provide a normal proportion of L. of C. units. Unless these were provided by the Canadians it would be necessary for the British to do so.

(Ibid: D.S.D.'s Notes Regarding Proposed Composition of Canadian Forces, 19 Jan 42).

14. The increase in the number of Canadian units rear of corps had been a complicated factor in the proposal to form a Canadian Army. But existing proposals still fell far short of the full proportion for an army. In calculating the total numbers required for an expeditionary force on the continent the following scales were used :

40,000 per division
35,000 per armoured division
5,000 per army tank brigade.

On this basis the Canadian contribution should have been 200,000, but the proposed composition amounted to only 180,000. The British would have to make up the difference, which was mainly in L. of C. troops. The additional L. of C. troops suggested made a total of 22,172 men. These were mainly engineers (12,407) and Army Service Corps (6,691). But small additions were also recommended in headquarters units, signals, medical, ordnance, postal, provost and intelligence. The list was, however, more in the nature of a suggestion as to how the proper quota might be met than a recommendation that any specific units should be provided.

15. Decision regarding these matters was postponed for the time being, while attention was concentrated on the formation of the Army Headquarters and its relationship to the existing operational and administrative structure. The one notable change in the proposals in the first half of 1942 was to abandon the idea of a distinct armoured corps in favour of two interchangeable corps as recommended by recent British experience (Ibid: Tel GS 386, CANMILITARY to DEFENSOR, 2 Feb 42; Tel GSD 300, DEFENSOR to CANMILITARY, 13 Feb 42). But it was indicated that numerous changes in detail might be necessary in the near future. The British were experimenting with new types of division, and also were embarking on trials for

continental operations as a result of which changes in unit establishments were expected. Lt-Gen McNaughton considered "that we should conform as closely as possible to War Office Unit W.E.'s, unless we have strong reasons to the contrary". (Ibid: Tel GS 1998, CANMILITARY to DEFENSOR, 12 Jun 42).

CANADIAN ORGANIZATIONAL PLANNING DURING 1942

16. On 18 Jul 42 a conference was held at C.M.H.Q. to discuss the composition of the Canadian Army Overseas. It was pointed out that the existing programme was short in ancillary troops needed to give the well balanced force envisaged by the Army Commander. It was necessary to proceed with a new plan at once without waiting for final decisions by the War Office concerning line of communication troops (C.M.H.Q. file 1/Can Army/2: Notes of Conference held at C.M.H.Q., 18 Jul 42). It was decided that plans should be drawn up immediately for a well balanced force.

17. Various decisions were taken on matters of detail. Corps troops were to be shown as basic corps troops for two corps and increments for each armoured and infantry division; this would allow any grouping of divisions that might be required. The organization of artillery units should differ from the British in certain respects (see below paras 121, 123, 129). This variation was due largely to the adoption by the British of the new divisional organization which was not being followed by the Canadians (see below paras 22-24). In the case of motor battalions in armoured divisions and brigade mortar companies, which were to be formed for infantry divisions, the British were cutting their establishments for manpower reasons. It had been recommended by both General Paget and Lt-Gen McNaughton that the Canadians should not do likewise. Manpower was not yet a limiting factor in Canadian calculations.

18. On the basis of the proposals made at this meeting a first draft proposal for the composition of the Canadian Army was drawn up (Ibid: Composition Cdn Army Overseas, First Proposal, 25 Jul 42). Further discussions took place at weekly intervals. It was noted that the organization of ordnance and medical units in divisions was under review. The British had made considerable changes in the organization of these services, and the Canadians were now considering what should be adopted for the Canadian Army. It was not thought necessary that the Canadian changes should follow the British in all respects (see below paras 176-178, 185-186). Final decision concerning line of communication units was postponed until the extent to which the Canadians would have to supply these was known (Ibid: Minutes of 2nd Conference held at C.M.H.Q., 25 Jul 42).

19. As a result of these and subsequent discussions, and suggestions from the Army Commander, the proposed composition was revised. The "Third Proposal" drafted on 5 Aug 42 became the basis for planning for the rest of the year (Ibid: Composition Cdn Army Overseas, Third Proposal, 5 Aug 42). Details of units in this proposal are shown in Appendix "A". The formations included had not undergone any major change since the beginning of the year. These were to be three infantry divisions, two armoured divisions, and two army tank brigades, grouped in two identical corps and an army. But there had been added a full proportion of L. of C. units in the plans, although it was not decided who would supply them. The target date for completion of the programme was 1 May 43.

20. The manpower implications of the "Third Proposal" were summarized as follows:

Present Fd Force W.E. (22 Jul 42)	136,746	
Approx. proposed increases to Fd Force	41,345	
Total Fd Force	178,091	178,091

C.M.H.Q. units W.E. (22 Jul 42)	20,032	
Approx. increases to C.M.H.Q. units (incl. B.O.W. and B.O.D.)	<u>11,797</u>	
Total C.M.H.Q. units	31,829	<u>31,829</u>
Total W.E.		209,920
Three months reinforcements in U.K. (Fd. and C.M.H.Q. units)	43,196	<u>43,196</u>
Total W.E. and reinforcements		253,116
Non-effectives, wastages, illiterates	27,624	
One month reinforcements in Canada	<u>13,762</u>	
Total	41,386	41,386
Total W.E., Reinforcement etc.		294,502
Less present provision (22 Jul 42)		<u>167,365</u>
Approx. net requirements (1 May 43)		127,137

As opposed to this total requirement, necessitating the provision of a further 127,137 all ranks, certain of the C.M.H.Q. units were slated for eventual service with the L. of C. of a Field Force. Also, the question of the provision of Canadian units for the "tail" or rear of the Field Force had not yet been settled with the War Office (see paras 14 and 64-70).

21. The proposed composition continued to undergo adjustments in detail. Early in September it was intimated by H.D.H.Q. that manpower difficulties might prevent the "Third Proposal" being implemented in full (Ibid: Tel GS 419, DEFENSOR to CANMILITRY, 5 Sep 42). Steps had already been taken overseas to examine possible economies in the programme. A summary of manpower requirements on 5 Sep 42 showed a reduction in the field force total of about 11,000 with a corresponding reduction in reinforcement requirements. This was partly offset by an increase for C.M.H.Q. units for which detailed proposals were now completed for the first time (Ibid: Composition Cdn Army Overseas, 5 Sep 42).

REORGANIZATION OF ARMoured DIVISIONS

22. In the early part of 1942 as a result of experience in the Middle East and elsewhere the British introduced a new divisional organization. A need for a higher proportion of infantry to work with armoured formations was met by introducing an infantry brigade in the armoured division in place of one of the armoured brigades. At the same time a new model division of one armoured and two infantry brigades was planned to replace infantry divisions of three infantry brigades. This new organization was tested in "TIGER" exercise in the spring of 1942.

23. Early in June Lt-Gen McNaughton expressed his views in a cable to H.D.H.Q.:

As a result of these further studies I have reached the conclusion that these proposals are retrograde; that the new divisional organizations will not stand the test of battle and indeed that they are likely to be very substantially altered in the near future. The new British Divisions lack flexibility and endurance both in attack and defence and in their employment ad hoc regrouping will usually be necessary.

In our present planned organization for First Cdn Army of three Inf Divs two Arm'd Divs two Army Tk Bdes with two Corps Headquarters we have facility to group our forces by formations which is likely to meet most circumstances of battle.

After explaining that there would be no difficulty in operating in close association with the British with the existing organization, he added: "This view has now been accepted by Paget as C.-in-C. designate of the Expeditionary Force." (C.M.H.Q. file 1/Cdn Army/1: Tel GS 1998, CANMILITARY to DEFENSOR, 12 Jun 42).

24. Although any change in the basic organization of the Canadian divisions was rejected at this time, it was indicated that a number of changes in detail would be necessary. One of these, the introduction of an additional field regiment in the armoured division, was recommended to be carried out immediately. Others would have to wait until the War Office policy was more clearly settled. Lt.-Gen. McNaughton in the same cable said: "I consider that we should conform as closely as possible to War Office Unit W.E.'s unless we have strong reasons to the contrary." (see para 15).

25. The question of the organization of armoured formations was reviewed in October 1942. At a meeting held at H.Q. First Cdn Army on 22 Oct it was agreed that there was a need for more infantry in an armoured division. Three organizations were considered :

(a) The existing British organization:

- (i) An armoured brigade of three armoured regiments and a motor battalion.
- (ii) An infantry brigade of three infantry battalions.
- (iii) An armoured car regiment.

(b) An organization proposed by G.S. First Cdn Army:

- (i) An armoured brigade of three or four armoured regiments.
- (ii) An infantry brigade of two infantry battalions, a motor battalion, and a carrier battalion.
- (iii) An armoured car regiment.

(c) An organization proposed by Maj.-Gen. E.W. Sansom, G.O.C. 5 Cdn Arm'd Div:

- (i) An armoured brigade of three armoured regiments.
- (ii) An infantry brigade of three infantry battalions.
- (iii) A light brigade of two motor battalions and a divisional reconnaissance regiment.

The general opinion of the meeting favoured something along the lines of

the last proposal (C.M.H.Q. file 1/Cdn Army/1/2: Minutes of Meeting held 22 Oct 42). In December, however, a decision to conform as closely as possible to British organization and establishments meant the adoption of the British organization for the armoured divisions (see below paras 30-37).

26. This change meant that there were three surplus armoured regiments in each of the two armoured divisions. There was also one surplus infantry (motor) Battalion, but two additional infantry battalions were needed for each division. The first suggestion was to amalgamate the six armoured regiments of each division into three with combined titles to perpetuate the units; the surplus motor battalion would be converted into the reconnaissance regiment now required; two additional infantry battalions would be provided by the conversion of machine gun battalions (Ibid: Memorandum, G.O.C.-in-C., First Cdn Army, 2 Dec 42). An objection was raised, however, that the amalgamation of the armoured regiments and the resultant despatch of the least efficient men to the reinforcement units would prejudice the availability of good reinforcements when required. (Ibid: Senior Officer, C.M.H.Q. to Headquarters First Cdn Army, 8 Dec 42). There were, moreover, other uses which had been proposed for the machine gun battalions (see below paras 160-162).

27. When definite proposals were submitted to N.D.H.Q. for approval the details of the conversion had changed considerably (Ibid: Tel Army 1/24, CANMILITARY to DEFENSOR, 24 Dec 42). It was now proposed to retain three armoured regiments intact in each division, and to convert one of the remainder into the armoured reconnaissance regiment; the other two would be withdrawn temporarily to the status of reinforcements with the ultimate intention of forming a tank delivery regiment and a third army tank brigade out of the four regiments. The infantry battalions were to be provided by the conversion of the surplus motor battalion in each division and the addition of two battalions from Canada. The effective date for this reorganization was to be 1 Jan 43.

28. The resulting proposed order of battle was as follows :

4 Cdn Arm'd Div

Arm'd Recce Regt:	29 Arm'd Regt (S. Alta R.)
Arm'd Bde:	21 Arm'd Regt (C.G.F.G.)
	22 Arm'd Regt (C.G.G.)
	28 Arm'd Regt (B.C.R.)
	Lake Sup R.
Inf Bde:	F.L. Fus
	Inf Bn
	Inf Bn

5 Cdn Arm'd Div

Arm'd Recce Regt:	3 Arm'd Regt (C.G.H.G.)
Arm'd Bde:	2 Arm'd Regt (Id 3.H.)
	5 Arm'd Regt (B N.B.H.)
	9 Arm'd Regt (B.C.D.)
	Westmor R.
Inf Bde:	Ir R. C. (from 4 Div)
	Perth R.

The units no longer required in the divisions were disposed of as follows:

25 Arm'd Regt (Elgin R)	- To provide tank delivery squadrons.
27 Arm'd Regt (Sher Fus R.)	- To become army tank
6 Arm'd Regt (I.H.)	regiments in 3 Cdn Army
10 Arm'd Regt (Fort Garry's)	Tk Bde.

1 Armd C. Regt (R.C.D.) - Withdrawn to army troops
18 Armd C. Regt (12 D.)

The former support group headquarters were converted into divisional artillery headquarters. H.Q. 3 Armd Bde became H.Q. 3 Cdn Army Tk Bde; H.Q. 1 Armd Bde became H.Q. Inf Bde in 5 Cdn Armd Div. The headquarters for the infantry brigade in 4 Cdn Armd Div was to be formed in the United Kingdom. 2 Cdn Armd Bde became 5 Cdn Armd Bde.

29. The reorganization of 5 Cdn Armd Div was carried out in the middle of January 1943. At the same time 3 Cdn Army Tk Bde was formed and 25 Cdn Armd Regt was attached to it for training. The two armoured car regiments were left with their respective divisions for training (Ibid: C.M.H.Q. Administrative Order No. 2, 10 Jan 43). The infantry brigade of 4 Cdn Armd Div was not completed until September 1943 when The Lincoln and Welland Regiment, The Algonquin Regiment, and The Argyll and Sutherland Highlanders of Canada (Princess Louise's) were selected. These units had all come over from Canada during the year (C.M.H.Q. file 1/Cdn Army/1/3: Tel GS 2401, CANMILITRY to DEFENSOR, 28 Sep 43).

THE ADOPTION OF BRITISH ESTABLISHMENTS

30. During 1942 the British had extensively revised their organization and unit establishments. Three main types of division were now adopted, an armoured division as described in the preceding section, an infantry division of three infantry brigades such as the Canadians had continued to use, and a division of one army tank and two infantry brigades. This divisional reorganization had involved some changes in unit establishments. The British had also been influenced by the shortage of manpower to adopt more economical establishments wherever possible. Neither of these factors had affected the Canadian Army throughout 1942. Further it was expected during that year that the Canadian Army would be in a position to operate independently, and there had been therefore no compelling reason for following all the British changes in establishment. Lt.-Gen. McNaughton pointed out that "as a result of this condition, the Cdn Army had been able to evolve its own ideas on battle organization and had produced many sound ideas, which had since been incorporated in British War Establishments." (C.M.H.Q. file 1/Cdn Army/1/2: Minutes of a Conference held 10 Jan 43.) There were other changes in detail introduced as a result of experience or new requirements; most of these had been considered for adoption by the Canadians, but not all had as yet been accepted in a final state.

31. But towards the end of 1942 it began to be doubtful whether the Canadian Army programme could be completed. By September it was apparent that the manpower situation in Canada was going to affect materially the development of the army programme. A message from the Chief of the General Staff, N.D.H.Q., gave this warning:

It is apparent now that A.G.'s forecasts as to monthly despatch for overseas cannot be implemented for next two months at least due to a combination of unavoidable circumstances and quite apart from method of procurement. Regarding long range programme necessary information and forecasts will not be available from selective service for another two weeks.... Feel you should know that uncertainties entirely apart from method of procurement make it inadvisable to assume that provision can be made for any substantial additional capital commitments to programme already authorized without full study and decision by war committee after necessary information is forthcoming.

(C.M.H.Q. file 1/Cdn Army/2: Tel GS 419, DEFENSOR to CANMILITRY, 5 Sep 42).

No adjustments were made in the programme at this time, but it was considered that the target date for completion might be postponed (Ibid: Tel G3 3183, CANMILITRY to DEFENSOR, 8 Sep 42). It was agreed to postpone this from 1 May 43 to 1 Oct 43 (C.M.H.Q. file 1/Cdn Army/1/2: Memorandum, G.O.C.-in-C., First Can Army, 26 Oct 42).

32. A further difficulty which made itself felt before the end of 1942 was the limitation of shipping (Ibid: Tel G3 583, DEFENSOR to CANMILITRY, 2 Nov 42). The shipping available to the end of April 1943 would suffice only to bring the reinforcement pool in the United Kingdom up to required standard. The Chief of the General Staff N.D.H.Q. proposed that attention should be concentrated on this. Lt.-Gen. McNaughton in reply pointed out that this would leave the Canadians unable to operate as an army as the necessary rear troops would thus be lacking. It was unlikely that these could be supplied by the War Office. He proposed instead during the first four months of 1943 to continue the completion of divisional and corps units, to complete various reorganizations already approved, and to devote the rest of the shipping accommodation to reinforcements (Ibid: Tel G3 3789, CANMILITRY to DEFENSOR, 9 Nov 42).

33. But a further cable from the Chief of the General Staff N.D.H.Q. said in part :

- I. Obviously our plans must be based on information presently available regarding governing factors of manpower and shipping to lead to a practical composition of the First Canadian Army having regard to a target date as early as possible in 1943.
- II. The conclusion reached on this review (of manpower) is that we are not justified in making commitments for fresh capital in the form of new units beyond the limitations expressed in Para VI.
- III. Consequently and without waiting to end of year we have to accept the conclusion that it is not feasible to plan for a composition of the First Canadian Army such that it could operate wholly independently with all Canadian Base L. of C. and Army troops which after all could seem to be envisaging the ideal.
- IV. As regards shipping... it must be accepted that there is little chance of any increase beyond the allotment now anticipated. If the rate of 5000 per month prevails throughout 1943 it will permit at most of provision of reinforcements for 1943 at battle casualty rate and transportation of units now authorized or their approximate equivalent in numbers. I would point out however that we shall accept any additional shipping space made available even if to fill it means a serious dislocation of our home defence units and formations.
- VI. Based upon above considerations I have recommended and A.G. agrees that our objective as to the strength of the First Canadian Army overseas should be limited first to presently authorized formed and forming units overseas. Second to presently

authorized units designated for overseas service formed or forming in Canada. Third to personnel for establishment increase... Fourth to units that we might be able to make available directly or by conversion from home defence formations. Fifth reinforcements at proposed new battle casualty rate.

(C.M.H.Q. file 1/Cdn Army/2: Tel CGS 615, DEFENSOR to CANMILITARY, 15 Nov 42.)

34. This definite statement of the limitations imposed by manpower and shipping was accepted by Lt.-Gen. McNaughton, who replied: "Under these circumstances I recognize also that it may not be possible to operate as a Cdn Army. I propose now if you agree to place situation before C.I.G.S. at War Office and obtain his view as to the best form our contribution can take." (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 3890, CANMILITARY to DEFENSOR, 17-Nov 42). He reported the result of this consultation with General Brooke four days later as follows: "It is very definitely General Brooke's opinion that the project for a Cdn Army should be maintained and he hoped that our 2nd Army Tk Bde would be sent over in due course. He said that shipping on the Atlantic would be easier in several months time and that we could count on increased allotments." It was indicated that some reduction in L. of C. units might be possible and that some use could be made of Forestry Corps personnel already in the U.K. Future operations might require the Canadians to be ready to operate as an Army on the Continent by 1 Oct 43 with only limited prior participation. "In consequence in my considered opinion our programme should aim at the following:

- (a) By 1 April 1943 our three inf Divs, two Armd Divs (reorganized on new British model) and one Army Tank Bde to be completed to establishment and two months reinforcements at Intense Rate to be available in United Kingdom. Also continue with development of selected rearward units for later use.
- (b) By 1 August 1943 after maintaining reinforcements at minimum of two months Intense, organization of the rearward units ... to be proceeded with."

(Ibid: Tel GS 3941, CANMILITARY to DEFENSOR, 21 Nov 42).

35. As a result of the above developments, consideration had to be given to the possibility of the Canadian divisions or corps operating separately as part of British formations. Although the Army Commander did not abandon the intention of creating a balanced Canadian Army, he considered it advisable in the interests of economy of manpower and co-operation with British formations to adopt British organization and establishments throughout. It had already been decided to reorganize the two armoured divisions on lines similar to the British (above paras 22-29), and it was now decided to adopt the British organization as a whole except for minor necessary changes (Ibid: G.O.C.-in-C., First Cdn Army to G.O's C., 4 and 5 Cdn Armd Divs, 2 Dec 42). At the same time instructions were issued that all arms of the service would be reorganized on British War Establishments (Ibid: Organization, First Cdn Army, 2 Dec 42).

36. Economy in manpower from this reorganization was not great. There were no appreciable differences except in armoured corps and infantry. The saving in the former by the reduction in the number of armoured brigades was almost completely offset by increased requirements for infantry (Ibid: Memorandum of A.D.A.G.(A), 5 Dec 42).

37. The benefits of a simplified co-operation with the British were felt particularly in the ordnance services. Although the proposal to follow British organization involved extensive reorganization of ordnance units (see below paras 187-188), the decision was welcomed by the Quarter-Master General's branch at C.M.H.Q., particularly since it was now possible that Canadian formations would be operating as part of a British force. "Every time a departure is made from the British organization, by adding another complete unit, portion of a unit, or even an individual officer or vehicle, the maintenance situation generally is thrown out of line and the additions have repercussions right back to the Base." This difficulty had been felt before. "With our policy in the past of endeavouring to have separate Canadian establishments, it has been found impossible to deal intelligently with the War Office on questions of supply." (Ibid: Memorandum, A.D.Q.M.G., C.M.H.Q., 8 Dec 42.)

REVISED PROPOSED ORGANIZATION

38. As soon as it had become doubtful whether the Canadian Army programme could be completed in full, steps were taken to revise the proposals. The task of coordinating this work was entrusted to a "Canadian Army Planning Committee" composed of representatives of both C.M.H.Q. and First Cdn Army. This was virtually identical with a committee which had been meeting since July 1942 and had drafted the proposed composition of the Canadian Army. This committee was now put on a permanent basis. It held its first meeting on 16 Nov 42 (C.M.H.Q. file 1/Conf Plans/1: Senior Officer C.M.H.Q. to G.O.C.-in-C. First Cdn Army, 6 Oct 42: also Minutes of First Meeting held 16 Nov 42).

39. The committee was instructed to plan the completion of the Army in three stages as follows :

- 1 Apr 43 : One corps composed of one armoured and two infantry divisions, to be ready to participate in large scale raids of limited scope and duration.
- 1 Aug 43 : Two corps comprising three infantry and two armoured divisions with essential army troops, to be ready to secure and hold a bridgehead on the Continent of limited depth.
- 1 Oct 43 : Force of 1 Aug 43 plus G.H.Q. and L.of C. troops and base units, to be ready to operate as a Canadian Army on the Continent with all essential rearward services.

(Ibid: Brig G.S. First Cdn Army to Senior Officer C.M.H.Q., 25 Nov 42.)

It was also stated that the G.O.C.-in-C. had decided to convert 2 Cdn Div to the new British "Division" using 1 Cdn Army Tk Bde for the armoured brigade (see above para 30). One of its infantry brigades would be used to complete 4 or 5 Cdn Armd Div. This arrangement was a purely interim measure (Ibid: Minutes of Second Meeting held 14 Dec 42).

40. The proposals had as yet done little to effect any real saving of manpower. Whereas the first stage could be completed with the expected availability of men, the third stage was still beyond any expected possibility (Ibid: Summary of Manpower Required, 18 Dec 42). The Army Commander was still discussing the manner in which the Canadian Army might be completed with the War Office.

41. As a result of these discussions it was planned to give the Canadian Army priority on shipping to the extent of 10,000 per month (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 4181, CANMILITARY to DEFENSOR, 21 Dec 42). This was about double the currently expected allocation.

Lt.-Gen. McNaughton reported further:

D.S.D. informed me this morning that W.O. and C.-in-C. Home Forces are counting on our troops in Order of Battle by 1 April 1943 as follows: Cdn Army H.Q. Two Corps H.Q., two Inf Divs (each three Inf Bdes), one Div (two Inf Bdes one Tk Bde), and one Armd Div together with quota of Corps, Army, etc. troops.

W.O. will contribute up to 9000 per Division as a permanent commitment to complete our rearward services and more if necessary until our own quota is fully available.

1 April 1943 is a target date and does not mean that operations are planned to commence then. They will probably be later.

Detailed calculations of manpower requirements show that with shipping rate proposed after providing for any necessary changes in Unit Establishments and the bringing over of units of 2 Cdn Corps now mobilized in Canada full scale of three months reinforcements should be available for our units in question by end April. In this connection W.O. are planning to hold only one months reinforcements immediately available for their force.

As a long term objective I propose that Cdn Army should comprise two corps with three Infantry Divs (three Inf Bdes), two Armd Divs (one Inf and one Armd Bde), and three Army Tank Bdes. Please note that this is five Armd Bdes in all as compared with six now authorized, but as number of tanks in new Armd Bdes is slightly increased the total tanks in the force remains substantially unchanged.

As an immediate project and in order to meet view C.-in-C. Home Forces with which I agree I propose :

- (a) that 1 and 3 Cdn Divs should continue on three Inf Bde basis.
- (b) that 2 Cdn Div should have 1 Cdn Army Tk Bde attached replacing an Inf Bde detached to provide temporarily the Inf Bde with 4 Cdn Armd Div.
- (c) that 5 Cdn Armd Div and 4 Cdn Armd Div should be reorganized on British model forthwith.

(Ibid: Tel GS 4182, CANMILITRY to DEFENSOR, 21 Dec 42).

42. A draft order of battle was prepared in December 1942 with a target date of 1 Oct 43 for completion. The composition was based on the assumption that First Cdn Army would be a "follow through" rather than an assault force. Thus special units such as Docks Operating Companies

and Beach Detachments were not included. The units which the War Office had undertaken to provide were indicated (see below paras 65 - 67). Heads of arms and services were requested to submit their recommendations on the suitability of the proposed composition. It was emphasized that departures from British organizations and War Establishments would be permitted only for the very strongest reasons (Ibid: Memorandum, Brig N.E. Rodger, 23 Dec 42).

43. Owing to the uncertainty as to the future role of First Cdn Army it was not possible at this time to complete the details for the rearward units that might be required. Accordingly, it was proposed to carry through the reorganization in the following order of priority :

- I. The completion of the five divisions on an organization that would facilitate their employment with a British force.
- II. The completion of the two corps troops and divisional increments, also on British establishments so that they could be used individually in a British force.
- III. The provision of such army troops as would be needed for service with detached corps.
- IV. The provision of other units needed for army, L. of C., and base to the extent to which Canada could supply.

The first three requirements could be determined with reasonable accuracy, but as far as the fourth was concerned the only thing definite was the British undertaking to supply 9000 men per division (Ibid: Tel GS 4221, CANMILITRY to DEFENSOR, 28 Dec 42).

44. The reorganization of the armoured divisions was approved by N.D.H.Q. on 23 Dec 42 (Ibid: Tel CGS 693, DEFENSOR to CANMILITRY 23 Dec 42). On 7 Jan 43 approval was similarly granted for the reorganization of 1, 2, and 3 Cdn Divs, which became known as 1, 2, and 3 Cdn Inf Divs, and for the completion of 1 and 2 Cdn Corps, and the mobilization of H.Q. 3 Cdn Army Tk Bde to administer the three surplus armoured regiments (Ibid: Tel CGS 16, DEFENSOR to CANMILITRY, 7 Jan 43; Tel GS 67, CANMILITRY to DEFENSOR, 11 Jan 43). The reorganization of the two corps took effect from 11 Jan 43. It involved the adoption of the British organization for the two armoured divisions, the formation of 3 Cdn Army Tk Bde, and the adoption of British War Establishments for all units. It was provided that the personnel of 3 Cdn Army Tk Bde would be used as reinforcements only when no other suitable reinforcements were available. The reorganization of machine gun battalions and brigade and divisional defence platoons was held in abeyance until British policy concerning new support companies was clarified. (Ibid: Administrative Order No. 2, 10 Jan 43). The effect of this reorganization on individual arms is described below. The most important changes involved were in R.C.A.S.C., R.C.C.C., and R.C.A.M.C. units (Ibid: Tels GS 4228, 4229, 4235, 4236, 4237, 4242, CANMILITRY to DEFENSOR, 29-31 Dec 42).

45. The ultimate organization of the Canadian Army envisaged three infantry divisions, two armoured divisions, three army tank brigades, quota of army, G.H.Q., L. of C., and base units. The detailed list proposed is given in Appendix "A". In this appendix the army, G.H.Q., and L. of C. units are taken from the list drawn up at the end of February 1943, when definite proposals were first forwarded to N.D.H.Q. The units which would be supplied by the British are not included. They consisted mainly of A.A. artillery, heavy artillery, labour and engineer units (see below paras 64-70). The target date for the completion of the programme for operations against the continent was 31 Aug 43 when the despatch of necessary personnel from Canada should be completed, but portions might be required earlier

(see para 71). The intermediate objective was the maintenance of existing infantry divisions, the completion of the equipment of 5 Cdn Arm'd Div, the completion of 4 Cdn Arm'd Div including two infantry battalions from Canada, the preparation of 1 Cdn Army Tk Bde for operations, the arrival of 2 Cdn Army Tk Bde in midsummer, and the completion of 3 Cdn Army Tk Bde (Ibid: Tel GS 83, CANMILITRY to DEFENSOR, 13 Jan 43; A few remarks on this new organization may be found in Historical Officer, Report No. 91)

MANPOWER CEILING

46. In June 1942 Lt.-Gen. McNaughton, outlining the problems involved in planning the organization of the Canadian Army, told N.D.H.Q. that he "would appreciate information as to total Establishment Canadian Field Army which might be used for basis of plans of development up to end March 1943, on the assumption that there are no major operations meanwhile". (C.M.H.Q. file 1/Cdn Army/1: Tel GS 1998, CANMILITRY to DEFENSOR, 12 Jun 42). It was not possible to provide this information until the general question of available manpower in Canada had been decided (Ibid: Tel GSD 1306, DEFENSOR to CANMILITRY, 26 Jun 42).

47. The request for figures on the manpower available was repeated later in the year (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 3941, CANMILITRY to DEFENSOR, 21 Nov 42). In answer the following picture was provided by the Chief of the General Staff:

- (a) If shipping were available an attempt would be made to despatch 64,000 men from Canada during the first eight months of 1943.
- (b) Increases in capital commitments during 1942 totalled over 44,000 instead of 18,000 as originally estimated.
- (c) It was felt desirable to maintain reinforcements for three months in the United Kingdom rather than for two months as had been suggested by the Army Commander.
- (d) It was emphasized that future commitments were subject to approval by the War Committee.

(Ibid: Tel CGS 643, DEFENSOR to CANMILITRY 25 Nov 42).

48. Plans were made on the basis of the numbers thus indicated as available. But it was impossible to draw up the complete proposals at once. Meanwhile great difficulty was experienced in getting approval for the initial proposals involving the reorganization of the five divisions overseas (Ibid: Tels CGS 672, CGS 697, GSD 13, DEFENSOR to CANMILITRY, 6, 26 Dec 42, 4 Jan 43; Tel GS 4221 CANMILITRY to DEFENSOR, 28 Dec 42). Lt.-Gen. McNaughton stressed the need for more expeditious action. "As indicated in several of my recent cables the reorganization of our divisions and corps tps is a most urgent matter and one which I do not consider should be further delayed for the meticulous calculation of establishments of each unit." He pointed out that in most cases a reduction in establishments was involved (Ibid: Tel GS 16, CANMILITRY to DEFENSOR, 5 Jan 43).

49. Authority was accordingly granted for the reorganization of infantry and armoured divisions and the completion of corps troops already authorized, and for the provision overseas of reinforcements for three months' wastage at the intense rate. A further step towards clarifying future development was taken by pointing out that the despatch of 64,000

men overseas during the next eight months would permit a maximum establishment including C.M.H.Q. units and reinforcements of 226,000 (Ibid: Tel CGS 16, DEFENSOR to CANMILITRY, 7 Jan 43).

50. A recalculation of the figures raised the overseas total of 232,100. The difference was made up largely by a decision to absorb overseas 4000 illiterates whom it had been intended to replace (Ibid: Tel CGS 38, DEFENSOR to CANMILITRY, 15 Jan 43; Tel GS 422, CANMILITRY to DEFENSOR, 26 Feb 43). Out of this total, after the requirements of authorized units and their reinforcements had been met, there remained a balance for use as required. This represented the numbers available for such additional units as were needed to complete the composition of the Canadian Army. Planning now proceeded on the basis of keeping the total strength within the manpower ceiling of 232,100.

51. The following points were brought out during a conversation between Lt.-Gen. McNaughton and Lt.-Gen. Stuart, C.G.S., N.D.H.Q., during a visit of the latter to the United Kingdom early in 1943:

General Stuart said that now the manpower ceiling for the Cdn Army had been fixed he considered that the internal organization of Cdn Army Overseas was a matter for General McNaughton's own decision, subject to: First - confirmation by N.D.H.Q. and by the War Cabinet where necessary; Second - the retention of three months' reinforcements at intense rate; Third - that capital increase will be limited to extent necessary to fall within replacement of battle casualty commitment at rate of 5000 per month as from 1 Sep 43. General McNaughton replied that he was satisfied that the total manpower now allotted to the Army in the U.K. by the Cdn War Cabinet was sufficient to develop the balanced army he had proposed and that he felt the total represented a just and proper contribution by Canada in present circumstances. It was agreed that every effort would be made to ensure a steady flow of approximately 5000 personnel monthly as reinforcements for the First Cdn Army after the target date 31 Aug had been reached.

(Ibid: Extract from Memorandum of Conversation, 12 Feb 43; for method of calculating the number of reinforcements needed see Hist Offr, C.M.H.Q., 5 Apr 45, Report No. 134).

52. Confirmation of this understanding was later embodied in a cable. In this the manpower ceiling of 232,100 was accepted and approval granted for the formation of new units subject to the three conditions outlined above (Ibid: Tel CGS 139, DEFENSOR to CANMILITRY, 6 Mar 43). A warning from C.M.H.Q. that under some circumstances 5000 a month might not prove sufficient, brought a reiteration from the C.G.S., N.D.H.Q., "that the manpower ceiling had two components, first the figure of 232,100 representing total strength and 3 months' reinforcements at intense rate, and second a flow of 5000 men per month subsequent to 1st September." (Ibid: Tel GS 524, CANMILITRY to DEFENSOR, 10 Mar 43; Tel CGS 149, DEFENSOR to CANMILITRY 13 Mar 43). This interpretation was accepted by the Army Commander (C.M.H.Q. file 1/Cdn Army/1/3: Tel GS 589, CANMILITRY to DEFENSOR, 20 Mar 43).

53. Some adjustments were subsequently made to this ceiling, but the principle and the total number of men available for the Field Force remained unchanged. When the 1st Canadian Parachute Battalion was included in the overseas force in the spring of 1943, the ceiling was raised by

1100 to 233,200 to take care of this unit and its reinforcements (Ibid: Tel AG 3811, DEFENSOR to CANMILITARY, 4 Jun 43). When ten companies of the Canadian Forestry Corps were returned to Canada at the end of 1943, the ceiling was reduced to 232,736 (C.M.H.Q. file 1/Cdn Army/1/5: Proceedings of the 8th Meeting of the Canadian Army Planning Committee, held 23 Mar 44). This represented the net reduction in the permissible size of the overseas army after 1500 from the Forestry Corps had been credited to the field force (C.M.H.Q. file 1/Cdn Army/1/4: Tel GS 2680, CANMILITARY to DEFENSOR, 29 Oct 43). In April 1944 the ceiling was again raised provisionally to include certain maintenance units required in the United Kingdom which would employ men of low medical category (C.M.H.Q. file 1/Cdn Army/1/5: Memorandum, D.C.G.S., C.M.H.Q. to S.D. & T., 15 Apr 44).

54. The status in relation to the manpower ceiling of the Canadian Women's Army Corps, Nursing Sisters, and army units serving with other forces became a matter for discussion in the summer of 1943. It had been assumed at C.M.H.Q. that the C.W.A.C. did not count against the ceiling, and there was also a desire to exclude Nursing Sisters and Dental companies serving the R.C.A.F. (C.M.H.Q. file 1/Cdn Army/1/3: Minutes of a Conference held at H.Q. First Canadian Army, 15 Jun 43; Tel GSD 965, DEFENSOR to CANMILITARY, 21 Jul 43). It was pointed out that the employment of C.W.A.C. overseas meant in effect a capital increase in personnel to the extent of those needed to administer this special group (Ibid: Memorandum, D.A.G., C.M.H.Q. to Senior Officer, 28 Jul 43). It was laid down, however, that the ceiling included "all female army personnel and army personnel employed with other services incl C.D.C. serving R.C.A.F." (C.M.H.Q. file 1/Cdn Army/1/4: Tel GSD 1307, DEFENSOR to CANMILITARY, 7 Oct 43).

55. The principle of the manpower ceiling was extended to both theatres in which the Canadian forces subsequently operated. In order to control the growth of the Canadian forces in Italy, which in the early part of 1944 was threatening to impair the availability of men for the remainder of First Cdn Army, a sub-ceiling was devised for that theatre in February 1944 (Ibid: Chief of Staff C.M.H.Q. to G.O.C.-in-C. First Cdn Army, 2 Feb 44; Tel GS 778, CANMILITARY to FLAMBO for CANDEX, 13 Mar 44). After the invasion of France had begun in June 1944, a similar ceiling was instituted for that theatre. The remainder of the manpower allowed, after these two sub-ceilings had been deducted, remained at the disposal of C.M.H.Q. for essential units in the United Kingdom, and for the provision out of a contingency reserve of such additions as might be necessary in either theatre (C.M.H.Q. file 1/Cdn Army/1/5: Chief of Staff, C.M.H.Q. to G.O.C.-in-C. First Cdn Army, 27 Jun 44). The War Office had adopted a similar method of controlling its manpower (Ibid: Proceedings of the 8th Meeting of the Canadian Army Planning Committee, held 23 Mar 44).

56. In August 1944 a new ceiling was established for the Canadian Army Overseas. The total now was 234,500. This provided for four dental companies to serve the R.C.A.F. and one to serve the R.C.N. It also included 1st Canadian Special Service Battalion, the Military Staff for the Canadian Mission at Algiers, the Canadian Army Show, and the military personnel of the Canadian Overseas Treasury Staff. The strength of these various units and staff accounted for the addition to the ceiling. It was further provided that capital increases would "continue to be limited so that estimated reinforcement commitments for battle casualties over a 12 months period will NOT exceed a monthly average of 4000". This was a drop of 1000 per month compared with the proposed provision when the ceiling was first established (Ibid: Chief of the General Staff, N.D.H.Q. to C.M.H.Q., 7 Aug 44).

AUTHORITY FOR MOBILIZATION OR REORGANIZATION OVERSEAS.

57. The expansion and reorganization of the Canadian Army was influenced to a great extent by British policy. Adjustments were also

necessary in the light of operational experience. For these and other reasons additions and changes had to be initiated overseas, often at short notice. If all changes in unit establishments or the composition of formations had to be authorized in Canada before they could be put into effect, considerable delay would be unavoidable. There was, therefore, a need to define the limits within which alterations could be made overseas without waiting for such authority.

58. When the formation of Army Headquarters was authorized in March 1942, the Army Commander was authorized :

- (a) to vary estabs of individual units up to maximum 5% for personnel of various Cdn war estabs incl C 1098 in consequential changes. When changes made Cdn estabs to conform to similar amendment authorized by Army Council for British estabs this authority is extended to 10%. All such changes in estabs to be forwarded N.D.H.Q. as early possible.
- (b) Army Comdr will have authority set up provisional estabs to cover experimental and temporary organizations and special courses of instruction subject to following conditions :
 - (i) Personnel to count as if held for reinforcements.
 - (ii) Ranks and trade groupings to be acting while so employed and to terminate when unit or course is disbanded.
 - (iii) N.D.H.Q. to be notified by you concerning details any such estab set up from date its inception probable date of termination and subsequently exact date of termination.

(C.M.H.Q. file 1/Cdn Army/1: Tel GSD 602, DEFENSOR to CANMILITRY, 23 Mar 42.)

This authority, in so far as adjustments to establishments were concerned, was subsequently confirmed by Order-in-Council, P.C. 44/3723 dated 4 May 42 (copy on C.M.H.Q. file 1/Cdn Army/1).

59. The telegram GSD 602 was interpreted overseas as permitting the initial mobilization of units listed in the army programme pending approval by the Privy Council. In defence of this it was pointed out that such procedure saved considerable time (Ibid: Tel GS 3316, CANMILITRY to DEFENSOR, 23 Sep 42).

60. But all new units formed under authority of telegram GSD 602 were counted as reinforcements. Any units intended for inclusion in the Canadian Army were thus left in an anomalous position, pending formal approval from Ottawa. There was, moreover, a reluctance at N.D.H.Q. to approve new units before the complete programme was clear. Early in 1943 it was necessary to mobilize rearward units for exercise "SPARTAN" before the full army proposals were ready. Authority was requested for this purpose with the explanation that the new requirements could be met out of the

personnel already authorized for despatch (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 420, CANMILITRY to DEFENSOR, 24 Feb 43).

61. The manpower ceiling recently established was used in Ottawa to define this further extension of authority :

Approval granted for formation on temporary basis of such additional units as may be required subject to following qualifications. First, confirming authority must be obtained from N.D.H.Q. as soon as establishments available; second, total strength plus 3 months reinforcements at intense rate must come within above stated manpower ceiling; third, capital increases must be limited so that estimated reinforcement commitments for battle casualties and wastage over 12 month period subsequent 1 September 43 will not exceed monthly average of 5000.

(Ibid: Tel CGS 139, DEFENSOR to CANMILITRY, 6 Mar 43).

It was subsequently confirmed that this authority covered also revision of existing establishments subject to the same conditions (Ibid: Tel CGS 149, DEFENSOR to CANMILITRY, 13 Mar 43).

62. The effect of these authorities was to give the Army Commander a free hand in organizing the Canadian Army subject only to the limitations of the manpower ceiling. Outside those limits units could be formed if necessary under telegram GSD 602, but personnel so used had to be counted as reinforcements. Moreover, reinforcements could not be demanded for such units. It was, therefore, recommended that this authority should be used sparingly and only in cases where the unit was of a truly temporary nature (Ibid: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 17 Mar 43).

63. When manpower sub-ceilings were established for the theatres of operations (above para 55), the Senior Canadian Commander in each theatre was given authority similar to telegram GSD 602, to form temporary units from his reinforcement pool. This permitted a degree of flexibility within the theatre without the delay involved in referring everything to C.M.H.Q. Any changes of a permanent nature had still to be referred to C.M.H.Q. for approval and the appropriate adjustment to the contingency reserve (C.M.H.Q. file 1/Cdn Army/1/4: Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 2 Feb 44; Tel GS 778, CANMILITRY to FLAMBO for CANDEX, 18 Mar 44, also C.M.H.Q. file 1/Cdn Army/1/5: Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 27 Jun 44).

THE BRITISH COMPONENT

64. When the Canadian Army programme was submitted to the War Office for comment at the beginning of 1942, the latter had pointed out the need for a large "tail" to maintain such a force in the field. They pointed out further that, in the circumstances which had existed in the previous year and a half, the general tendency had been to reduce administrative units in order to provide as many fighting units as possible. Accordingly, there was a shortage of the type of units that would be required on the lines of communication for large-scale operations on the continent. It was suggested that the Canadians should provide their proper proportion (C.M.H.Q. file 1/Cdn Army/1: Brig. D.G. Watson, D.D.S.D., War Office to Lt.-Gen. A.G.L. McNaughton, 20 Jan 42).

65. During 1942 Canadian planning had taken this requirement into account. But when the limitations of Canadian manpower became known, it became necessary either to reduce the number of combatant formations or to hand over responsibility for many of these rear units to the British. In December 1942 the War Office agreed to contribute up to 9000 men for each

Canadian division (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 4182, CANMILITRY to DEFENSOR, 21 Dec 42).

66. The units which it was proposed that the British should contribute towards the Canadian quota consisted mainly of anti-aircraft artillery, heavy artillery, labour and engineer units (Ibid: Tel GS 83, CANMILITRY to DEFENSOR, 13 Jan 43). Of these one light and one heavy anti-aircraft regiment, one field regiment, and two heavy artillery regiments, with their ancillary signals, army service corps and ordnance units, were to be included within First Cdn Army troops. The remainder were all C.H.Q. or L. of C. units (Ibid: List, Army Troops, 21 Dec 42). The principle was, as far as possible, to complete First Cdn Army with Canadian units (C.M.H.Q. file 1/Cdn Army/1/3: Memorandum, D.A. & Q.M.G., First Cdn Army to G.O.C.-in-C., 17 Aug 43). In the case of anti-aircraft artillery the British were in a particularly good position to allocate units which had been serving in the Air Defence of Great Britain (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 4221, CANMILITRY to DEFENSOR, 28 Dec 42). The Canadians had no heavy artillery overseas and this became a purely British commitment (C.M.H.Q. file 1/Org Arty/1: Memorandum, G.S.O. II, S.D. 1, C.M.H.Q., 10 Jul 43).

67. When the details of G.H.Q. and L. of C. troops began to be worked out in conjunction with the War Office, it was found that the British undertaking to contribute 9000 men per Canadian division did not remove all difficulties. A tentative composition of a field force was prepared to include thirteen British divisions and five Canadian divisions. It was found that the requirements for British troops were 62,000 over their available manpower, and the proposed provision of Canadian troops 17,000 over the limit set for the Canadian Army Overseas (C.M.H.Q. file 1/Conf Plans/1: Proceedings of C.A.P.C. Meeting, 1 Feb 43). The Canadian Army was forced to cut its contribution to the limit prescribed and to rely on the British to make up the difference. A list of the units the Canadians proposed to supply for G.H.Q. and L. of C. troops was completed by the end of February 1943 (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 455, CANMILITRY to DEFENSOR, 1 Mar 43).

68. A revised composition of the field force was prepared in March 1943. The following points were noted :

- (a) Although the B.E.F. comprises 477,480 British personnel and 167,124 Cdn personnel (i.e. about 3 British to 1 Cdn), the "equivalent" divisions are in the proportion of 9 British and 6 Cdn (three Cdn Tk bdes counting as an equivalent div). In other words, although the average gross division is 42,000, only 28,000 Cdn personnel are being provided for each Cdn division, and the War Office is providing the remaining 14,000 for each of our gross equivalent divisions.
- (b) The resultant British manpower commitment is now being examined to decide whether even this force can be raised. It is extremely unlikely that additional British personnel can be found, and the War Office General Staff will not accept any proposals for additions to the British portion of the Force unless accompanied by proposals for compensating deductions. Thus it is apparent that only for the strongest reasons would the War Office accept a further increase in Cdn demands for British manpower, and consequently further changes in the composition of Cdn Army overseas will have to be made by adjustments within our own manpower allotment.

(C.M.H.Q. file 1/Cdn Army/1/3: B.G.3., C.M.H.Q. to Senior Combatant Officer, Cdn Army Overseas, 27 Mar 43).

69. The War Office accepted this substantial increase in their contribution over the original 9000 per division. They pointed out, however, their difficulty in finding enough tradesmen, particularly for transportation, signal, transport, ordnance and workshop units, (Ibid: Memorandum, Director of Staff Duties, War Office to C.M.H.Q., 9 Apr 43). The Canadians found that they were obliged in some instances to govern the choice of unit they provided for rear areas by the availability of different types within British resources. Thus railway units, L. of C. signals, general transport companies, and some ordnance personnel were ultimately included in the Canadian provision, due largely to British inability to produce enough such units (see below paras 138, 147, 172, 191). Future planning was governed by the relative ability of each country to supply. As these rearward units were not specifically connected with either of the armies they served, it is not possible to provide a list of British units which formed part of the Canadian Army's quota. A general idea of the proposed Canadian units they replaced may be obtained by comparing the second and third columns in Appendix "A".

70. One result of the British provision of many units for rear areas, and the Canadian concentration on forward troops, was a disproportionate requirement for men of high medical category in the Canadian Army. Moreover in order to maintain the field formations, Canadian static establishments were reduced to the barest minimum. (Ibid: Memorandum of a Conference held at H.Q. First Cdn Army, 17 Jun 43). But the Canadian Army Overseas had acquired a large number of men of low medical category. It was estimated that they would have from 15,000 to 20,000 who could not be absorbed in the proposed composition (Ibid: Memorandum, D.A.G., C.M.H.Q. to Senior Officer, 24 Jun 43). The replacement of these meant a further strain on Canadian resources of men fit for field service. (Ibid: Manpower Canadian Army in Canada, 19 Jun 43: Tel CG 1502, CANMILITARY to DEFENSOR, 26 Jun 43).

ADJUSTMENTS DURING 1943

71. At a conference held on 10 Jan 43 at H.Q. First Cdn Army Lt.-Gen McNaughton outlined the general situation regarding the development of the Canadian Army. In the course of this he said that "the strategic requirements were that the enemy should be forced to disperse his effort, that he should be required to use up his manpower and reserves of materials and that he should be worn down on every front." General McNaughton said that "it was now apparent that no major operation against N.W. Europe could take place until signs appeared of a crack in the German morale." After outlining the factors which had led up to the major reorganization then in progress, he stated that "the target date for the completion of the organization of the Cdn Army for operations against the continent was 31 Aug 43 and he thought himself that this objective might well be reached about 1 Oct 43." In the meantime there would probably be small-scale raids, and "plans were now being studied for operations against 'the belly of the enemy' which might involve the use of one or more Cdn Inf Divs operating in a British Corps." The programme of development, accordingly, had to be so planned that such smaller forces would be completed in advance. The first priority in the movement of troops from Canada had been given to reinforcements. General McNaughton said that "he would not sanction the participation of a Cdn formation in any operation unless a reasonable number of reinforcements were available in the U.K. to give it endurance." He also pointed out the need for economy of manpower in all formations and units (C.M.H.Q. file 1/Cdn Army/1/2: Minutes of a Conference held at H.Q. First Cdn Army, 10 Jan 43).

72. Such was the background against which the development of the Canadian Army had to be planned in 1943. Almost immediately it began to be apparent that lack of men would be the most serious problem. Early in February, as a means of reducing the requirement, it was suggested that 2 Cdn Inf Div might be converted to a "Division" by the inclusion of the

newly formed 3 Cdn Army Tk Bde and the transfer of an infantry brigade to complete 4 Cdn Arm'd Div (C.M.H.Q. file 1/Conf Plans/1: Minutes of Fourth Meeting of Canadian Army Planning Committee, 3 Feb 43). This suggestion, similar to one he had himself proposed as a temporary measure, was rejected by the Army Commander (see above para 41). He proposed instead to make reductions in Army, G.H.Q. and L. of C. troops (Ibid: Minutes of Fifth Meeting, 27 Feb 43). 2 Cdn Inf Div was never converted even as a temporary measure. By drastic cutting of the Canadian contribution towards rear units, a tentative composition for the whole Canadian Force was completed in February (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 455, CANMILITRY to DEFENSOR, 1 Mar 43). At the same time an interim force was planned to be ready by 1 Apr 43. (Ibid: Programme for Completion in Personnel and Equipment, 26 Feb 43). It was recognized that in this proposed composition there were many details that could not be considered as settled (Ibid: Senior Officer, C.M.H.Q. to Under Secretary of State, War Office, 3 Mar 43).

73. While the Canadian Army was trying to make its proposed composition balance with the number of men available, there continued to be difficulty in obtaining shipping to move the men to the United Kingdom. In March 1943 Mr Churchill asked the Canadian government to relinquish part of the Canadian Army's allotment in favour of the United States Army Air Force. Owing to the shortage of landing craft it was unlikely that major operations against the continent could be launched in the summer of 1943. But Russian insistence made continued pressure on Germany imperative, and under the circumstances this could only be done by air action. Accordingly it was of prime importance to assemble the necessary ground crews to service the American aircraft already in Britain. The delay in completing the Canadian Army would have to be accepted (C.M.H.Q. file 1/Cdn Army/1/3: Tel GS 570, CANMILITRY to DEFENSOR, 16 Mar 43). In fact no delay ensued. It was found possible to increase the capacity of the two large ships, "Queen Mary" and "Queen Elizabeth", from 11,000 to 15,000 and by thus moving more men each trip to meet the needs of both the United States Army Air Force and the Canadian Army (Ibid: Tel CGS 166, DEFENSOR to CANMILITRY, 21 Mar 43).

74. The proposed composition prepared in February 1943 soon proved in need of revision. Additional demands totalled over 21,000 by the end of March. These were in part due to War Office requests that the Canadians supply certain types of unit for rear areas, particularly signals and ordnance, for which the British lacked the necessary tradesmen, (see above para 69). But there were also requests for increased establishments or additional units from the heads of Canadian services; these particularly affected supplies and transport and general labour (Ibid: Memorandum, B.G.S., C.M.H.Q. to Senior Combatant Officer, Cdn Army Overseas, 27 Mar 43). After being reviewed by the Army Commander, increases totalling over 8000 men were accepted; the largest additions were two advanced components for the base ordnance depot and general pioneer companies. To offset these 2 Cdn Army Tk Bde and one army reconnaissance regiment were deleted from the proposed composition, and it was decided that 50% of the permanent establishment of Canadian Reinforcement Units should be reinforcements (Ibid: Tel GS 805, CANMILITRY to DEFENSOR, 13 Apr 43).

75. In spite of these deductions the demands for additional men soon raised requirements over the ceiling once more. Increased establishments for infantry and support battalions had accounted for most of this latest increase, but there were other difficulties in sight. There were overseas a large number of men who were not fit for field duty, and the comparatively small number of rear units were not sufficient to absorb them. (Ibid: Composition Cdn Army Overseas, 1 May 43). Decision regarding these problems was postponed. The Army Commander pointed out that plans for future operations were not yet settled, and were not likely to be until after the conclusion of the Washington Conference then in progress (June 1943). Until the operational plan was decided the composition of First Cdn Army could

not be determined. It was accordingly recommended that for the present only units urgently required should be added to the proposed force (Ibid: P.A. to G.O.C.-in-C., First Cdn Army to Senior Officer, C.M.H.Q., 27 May 43).

76. In June steps were taken to reconcile the figures. Lt.-Gen. McNaughton maintained the principle "that reductions should affect rear-most H.Q.s and establishments first, and that if the possible reductions in these establishments were insufficient only then would he consider reductions in the field army". (Ibid: Memorandum of a Conference held at H.Q. First Cdn Army, 17 Jun 43). The reductions proposed still further aggravated the problem of absorbing the medically unfit men. But it was hoped that many of these could be replaced by returning them to Canada in exchange for men fit for field service. N.D.H.Q. stressed the importance of this two-way traffic, and the Army Commander assured them that the rate of despatch to Canada of unfit men would soon be increased. He expressed his confidence that all essential units could be provided within the manpower ceiling. (Ibid: Tel AG 3811, DEFENSOR to CANMILITARY, 4 Jun 43; Tel GS 1387, CANMILITARY to DEFENSOR, 14 Jun 43). There was, however, some doubt whether in fact Canada could replace all those men who were unsuitable for employment overseas. As voluntary enlistments in Canada were not meeting the proposed reinforcement needs of 5000 per month, it was unlikely that any further men would be available to replace low-category men overseas (Ibid: Manpower, Canadian Army in Canada, 19 Jun 43). It was stressed by C.M.H.Q. that the present proposals to balance manpower were based on two assumptions :

- (a) That the War Office was willing and able to provide the remainder of the units necessary to make a properly balanced force, including several previously considered as a Canadian commitment.
- (b) That N.D.H.Q. was willing and able to replace men overseas who by reason of age, medical category, or mental capacity could not be absorbed in the proposed composition.

(Ibid: Tel GS 1502, CANMILITARY to DEFENSOR, 26 Jun 43).

77. The position with regard to these two assumptions was outlined by Lt.-Gen. McNaughton in the course of a conference early in July at which Lt.-Gen. Stuart, C.G.S. at N.D.H.Q., was present. He stated that the target date for the completion of the force to operate on the continent was 1 May 44.² In consequence the Canadian Army would have several months after the completion of their initial programme in September 1943 in which casualties would presumably be below 5000 per month. He expressed the view that this period could be used for the replacement of the low-category men. Referring to a suggestion that 4 Cdn Armd Div might have to be broken up, he said "that it would be very unsound to break up a Cdn formation at this stage of the war as it would have a great psychological effect on the enemy and the reaction of the Cdn public would probably be most unfavourable." Decision regarding these alternatives rested with the Minister of National Defence. General McNaughton went on to say

that the Cdn Army Overseas looked to the Chiefs of Staff Committee for strategical guidance but that so far this had been more notable for its changeability than for its stability. He quoted as an example the

x See also Report by The Supreme Commander to the Combined Chiefs of Staff on the Operations in Europe of the Allied Expeditionary Force 6 June 1944 to 8 May 1945, London 1946, page 1 et seq.

fact that he had had 24 hours in which to decide upon the participation of Cdn formations in operation "HUSKY". He expressed his gratitude to the C.G.S. and to the Minister of National Defence for the sympathy which they had shown towards him in the difficult position in which he is placed. He said that this instability and lack of information would continue until such time as Canada had adequate representation in the political direction of the war. He said that such representation was required on the Ministerial level, and that it could not adequately be discharged by a military commander.

(Ibid: Minutes of a Conference held at H.Q. First Cdn Army, 3 Jul 43).

Operation "HUSKY", which involved the despatch of 1 Cdn Inf Div and 1 Cdn Army Tk Bde to Sicily, was then about to start.

78. It was clear that the completion of Canadian plans were handicapped by lack of information from the War Office. There was, however, no suggestion that the Canadians were being regarded as in a subordinate position. The following January, Mr. Ralston referred to this subject in a letter to Lt.-Gen. Stuart when the latter assumed the appointment of Chief of Staff at C.M.H.Q.:

There will quite probably be some debate in which the question of our attitude towards the views of the War Office may come up and an expression of our self-dependence even in co-operation would help to make our attitude clear. As a matter of fact, I am quite satisfied that those in authority today at the War Office understand and recognize our position thoroughly, and also that in Government itself there is a great change from the days of the Great War when Sir Robert Borden had to become very forthright in his communications with them.

(C.M.H.Q. file 1/Cdn Army/1/4: Mr. Ralston to Lt.-Gen Stuart, 15 Jan 44.)

79. During the rest of the summer the constant struggle went on to make the proposed composition of the Canadian Army balance with the available manpower. Early in July a statement incorporating the reductions in rear areas mentioned above (para 76) showed a contingent reserve of almost 4000 within the ceiling (C.M.H.Q. file 1/Cdn Army/1/3: Proposed Composition Cdn Army Overseas, 2 Jul 43). But it was some time before agreement was reached with the British over their respective contributions in rear units. The Canadian attitude was that if the British wanted the Canadian Army to make any additions to their latest proposals, there would have to be compensating replacements elsewhere. (Ibid: Notes on conference in Office of S.O., C.M.H.Q., 20 Aug 43). At the same time the problem of fitting the men available into suitable parts of the proposed establishment continued to be difficult. In addition to some 15,000 unfit men, for only 10,000 of whom had provision been made for replacement, there was a shortage of various types of tradesmen (Ibid: Records of a Meeting held in the Office of the Minister of National Defence at C.M.H.Q., 4 Aug 43).

80. The despatch of troops from Canada to bring the Canadian Army Overseas up to the limits of the manpower ceiling was completed by September 1943. For the rest of the year the monthly flow of reinforcements was cut below the figure of 5000 originally planned, but there was still some provision for replacement of low-category men. N.D.H.Q.,

however, stressed the need for absorbing every man possible into the army overseas. "We are at one with you in wishing that the Canadian Army should be streamlined as to age, physical and mental category to the great extent our manpower resources will allow, but you will realize that after 4 years of war activities our resources of young fit men are not by any means inexhaustible." (Ibid: Tel AG 5252, DEFENSOR to CANMILITRY, 17 Sep 43). By the end of September the proposed composition of the Canadian Army had reached a fairly definite state. There continued to be points of detail that would involve minor changes, but the major problems had been solved (C.M.H.Q. file 1/Cdn Army/1/4: Memorandum, G.S.O. 1, S.D., C.M.H.Q., to B.C.S., 2 Nov 43).

THE EFFECT OF A DIVIDED FORCE

81. In July 1943, while the development of the Canadian Army was still in progress, 1 Cdn Inf Div and 1 Cdn Army Tk Bde took part in the allied landing in Sicily. These two formations were due to be ready for action by the spring of that year for just such a purpose, (see above para 71). Their departure, accordingly, did not cause any disruption of the programme, and it was expected that they would have returned to the United Kingdom before the end of the year (C.M.H.Q. file 1/Cdn Army/1/3: Memorandum of a Conference held at H.Q., First Cdn Army, 17 Jun 43). It was merely necessary to bring units and reinforcements up to strength, a process indeed that appeared temporarily to exhaust available reserves of men (Ibid: Memorandum, A.A.G. (Org) to D.A.G., C.M.H.Q., 7 Jun 43).

82. But when at the end of the year, instead of the original force returning, the Canadians in Italy had increased to the size of a corps with a proportion of army and L. of C. units, a new complication had been added to the organization of First Cdn Army. One point, which had raised problems even before the departure of 1 Cdn Corps, was the use by the British, in the Mediterranean theatre, of establishments which frequently differed from those in use in the United Kingdom. Once more there was a general reorganization of Canadian units for the sake of conformity with the rest of the force of which they formed part. It was some time, however, before the problem of authorizing this change was settled (see below para 112). But by the beginning of November the list of new establishments was complete (C.M.H.Q. file 1/Cdn Army/1/4: Senior Officer, C.M.H.Q. to Secretary, Department of National Defence, 22 Dec 43).

83. But a more serious complication soon made itself felt. The existence of a Canadian force in Italy led to the creation of certain administrative units, which were duplications of ones already planned or in existence for the main body of the Army. As a result the small contingency reserve within the manpower ceiling, which had been established with so much difficulty, soon disappeared (Ibid: Tel GS 391, CANMILITRY to DEFENSOR, 7 Feb 44). There was a natural tendency to give priority to maintaining the formations in action at the highest point of efficiency. Thus the best trained reinforcements were all finding their way to Italy, and it began to be feared that the rest of the Canadian Army was suffering in consequence (Ibid: P.A. to G.O.C.-in-C., First Cdn Army to Senior Officer, C.M.H.Q., 2 Dec 43).

84. The position was outlined as follows in a cable from General Montague to General Crerar, commanding 1 Cdn Corps :

- I. Must draw your attention to continued requests for increases to establishments Cdn Sec 1 Ech and other base and L. of C. details now being received from Beament. Realize many of these of small dimension but accumulative effects now achieving serious proportions. For your info since base installations originally approved and set up in theatre total personnel

involved in new demands received amount to 228 offrs and 1342 O.R.s of which more than 60 per cent are apparently required for base and L. of C. details for which British are responsible.

- II. You will agree approved policy and imposed manpower ceiling does not allow large build-up for base and L. of C. installations and that with small contingency reserve of manpower available we cannot approve additions without corresponding reductions elsewhere.
- III. Situation extremely complicated by necessity of providing for two theatres. Needs of both must be carefully weighed in balance before granting approval even in principle to many recommendations received. While doubtless general requirements discussed with you feel I must request that you with Beament exercise careful scrutiny upon all new and unforeseen demands already made and which in future may be requested.
- IV. Earnestly desire to provide you and your tps with best possible services but feel you must appreciate no present prospect of obtaining authority to increase overall manpower ceiling. Can assure you every effort being made here to increase working margin and availability of personnel by reduction static establishments review of attachments and cutting out non essential units.

(C.M.H.Q. file 1/Org Med/1: Tel GS 3163, CANMILITRY to ORE for CANDEX, 15 Dec 43).

85. As a result of this situation it was decided to impose a manpower ceiling for Canadian forces in operational theatres (see above para 55). This applied at the time, February 1944, only to Italy (C.M.H.Q. file 1/Cdn Army/1/4: Chief of Staff, C.M.H.Q. to General Officer Commanding, First Cdn Army, 2 Feb 44). The immediate intention was to place some control on expansion in Italy while preparations were being made for the invasion of France. This action was taken with the full accord of the War Office, who had found it necessary to take similar action in respect of their own forces (Ibid: Tel GS 357, CANMILITRY to FLAMBO for CANDEX, 4 Feb 44).

FINAL CHANGES BEFORE OPERATIONS

86. Early in January 1944 a meeting of the Canadian Army Planning Committee was called to consider the manpower requirements for the ultimate organization of the force, including an adequate contingency reserve. The current situation was that requirements exceeded the ceiling by about 600 all ranks, due mainly to reasons outlined in the preceding section. Against this was an expected saving by reorganizing the Reinforcement Units of about 1400, but this would not produce a sufficient reserve, for which 3000 was regarded as a minimum figure. Accordingly consideration had to be given to the elimination of certain units from the composition. It was recommended that the following be deleted :

- (a) Three engineer battalions from G.H.Q. and L. of C. troops; these units had no counterpart in the British Army.

- (b) Two out of four general transport companies from the Army Troops Transport Column; these were not considered necessary by First Cdn Army and had not in fact been formed.
- (c) One light anti-aircraft regiment from army troops.

(C.M.H.Q. file 1/Cdn Army/1/4: Proceedings of the 7th Meeting of the Canadian Army Planning Committee, held 6 Jan 44).

87. As a result of strong representations by the War Office, it was decided not to withdraw the engineer battalions. But it was felt necessary to delete both light anti-aircraft units hitherto included in Army troops, together with headquarters of the anti-aircraft brigade; at the request of the War Office 2 Cdn H.A.A. Regt was retained. The two general transport companies were also eliminated. On the other hand it was hoped to add the Royal Montreal Regiment as a motor battalion in 2 Cdn Armd Bde (Ibid: Chief of Staff, C.M.H.Q. to Under Secretary of State, War Office, 2 Feb 44).

88. The War Office agreed to replace the light anti-aircraft regiments and their ancillary signals, service corps, and ordnance. But they were unable to replace the general transport companies, which the Commander-in-Chief of 21 Army Group considered to be essential for G.H.Q. troops. Therefore the idea of including a motor battalion in 2 Cdn Armd Bde had to be dropped (see below para 101), as it was impossible to provide both this and the transport companies within the manpower ceiling (Ibid: Tel GS 530, CANMILITRY to DEFENSOR, 19 Feb 44). Canadian preference was to find a position for the R.M.R. in the order of battle, or to include light anti-aircraft regiments in army troops, rather than to provide general transport companies for G.H.Q. troops (Ibid: Tel GS 104, DEFENSOR to CANMILITRY 22 Feb 44). But a motor battalion was not considered necessary for an independent armoured brigade, and the British could replace the anti-aircraft regiments. It was, therefore, necessary for the Canadians to fulfil their moral obligation to supply the transport companies on which the War Office was counting (Ibid: Tel GS 561, CANMILITRY to DEFENSOR, 23 Feb 44).

89. At the end of 1943 it had been agreed that five of the Canadian Forestry Corps Companies would be transferred from their work in Scotland for the Ministry of Supply to be included in the field force. In May 1944 the War Office requested, with the concurrence of the Ministry of Supply, that five additional companies should be similarly reallocated. (See Report No. 151, Hist Offr C.M.H.Q. 18 Mar 46). The only effect, as far as the Canadian Army programme was concerned, was the slight increase in reinforcement rates which meant a very small additional charge against the manpower ceiling (C.M.H.Q. file 1/Cdn Army/1/5: Tel GS 1520, CANMILITRY to DEFENSOR, 18 May 44). The request was accordingly approved.

90. Throughout the early part of 1944 the maldistribution of reinforcements by arms and trades continued to give concern. Figures for the end of February showed a considerable surplus in armoured corps, artillery, engineers, and miscellaneous units, but there was a deficiency of over 6000 in infantry, and minor deficiencies in some other arms. There were similarly deficiencies in some trades and a surplus in others. Efforts were being made to remuster to infantry suitable men from arms where there was a surplus (C.M.H.Q. file 1/Cdn Army/1/4: Memorandum, A.D.A.C.(A), C.M.H.Q. to H.G.A., 28 Mar 44). Steps had already been taken to expedite the training of tradesmen, and by grouping allied trades to facilitate their distribution (Ibid: Proceedings of a Meeting held at C.M.H.Q., 23 Dec 43).

91. Another matter that was hampering the availability of reinforcements was the existence of a large number of temporary units formed under the authority of telegram G-3D 602. Men employed in such units were counted as reinforcements. The situation had been reviewed early in January with a view to reducing the number of these (Ibid: Proceedings of the 7th Meeting of the Canadian Army Planning Committee, held 6 Jan 44). Towards the end of March there were 1083 officers and 15,641 other ranks employed in temporary units. This meant that this number of reinforcements was not immediately available for their primary purpose. At that time it was recommended that about half this number should continue to be so employed; it should be noted that a large number of these was on the establishment of reinforcement units, and therefore presumably needed to be retained only so long as there were reinforcements (C.M.H.Q. file 1/Cdn Army/1/5: Proceedings of the 8th Meeting of the Canadian Army Planning Committee, held 23 Mar 44).

92. Apart from these difficulties over the availability of reinforcements, in the middle of May the proposed composition had again exceeded the manpower ceiling by 22 men. During the next month this figure had risen to over 1200. It was requested that in future no increase in units or establishments should be contemplated without offering compensating reductions (Ibid: Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 15 Jun 44). The Army Commander assured C.M.H.Q. that no request would be submitted unless it was based upon the strongest operational reasons (Ibid: G.O.C.-in-C., First Cdn Army to Chief of Staff, C.M.H.Q., 17 Jun 44). By a revision of the terms of the manpower ceiling in August the balance was restored. There had been a figure of over 6000, equalling 3% of the total force, held to offset men who were in hospital, on course, etc. Since the Canadian Army was now in action all casualties were included in the general wastage rates, and it was considered unnecessary to continue to make this allowance. By removing this provision a slight contingency reserve was once more established (Ibid: Chief of the General Staff to C.M.H.Q., 7 Aug 44). The composition of the Canadian Army Overseas in June 1944 may be found in Overseas Routine Order No 4607, 15 May 44, as amended by Overseas Routine Order No 4771, 20 Jun 44.

CANADIAN ARMOURD CORPS UNITS

93. At the beginning of 1942 the armoured units existing or proposed for the Canadian Army Overseas were:

- (a) Twelve armoured regiments, six for each of two armoured divisions.
- (b) Six army tank battalions, three for each of two army tank brigades.
- (c) Four reconnaissance battalions, one for each of three infantry divisions and one for army troops.
- (d) Two armoured car regiments, one for each of two armoured divisions.

Of these 4 Cdn Arm'd Div, 2 Cdn Army Tk Bde, and the reconnaissance regiment for army troops were still in Canada (C.M.H.Q. file 1/Cdn Army/1: Proposed Composition Canadian Army (Field Force), 16 Jan 42). 4 Cdn Arm'd Div arrived overseas in the autumn of 1942; 2 Cdn Army Tk Bde and 30 Cdn Recce Regt arrived in the summer of 1943 (Reports No. 85 and 110, Hist Offr C.M.H.Q.). In the "Third Proposal" of August 1942 a reconnaissance regiment was to be added to each of two corps (C.M.H.Q. file 1/Cdn Army/2: Composition of Cdn Army Overseas, Third Proposal, 5 Aug 42).

94. In October 1942 the whole organization of armoured formations and units was reviewed (see above para 25). At this meeting reference was made to the following conclusions reached at a study week^x recently held

^x See also Martel, Our Armoured Forces, London 1945, pages 163-4.

at Staff College, Camberley:

- (a) The responsibility for medium and long distance reconnaissance was removed from the armoured division, together with the armoured car regiment and taken over by corps or army.
- (b) A tracked reconnaissance unit was necessary with the armoured division.

In the discussion which followed agreement was reached on the following points :

- (a) Army must accept responsibility for medium and long distance reconnaissance. For this purpose the armoured car regiment was suitable and should be removed from the armoured division.
- (b) An armoured reconnaissance regiment was needed. In view of the desirability of standardization this should be based, like the armoured regiments, on the M 4 (Ram) tank.
- (c) Three armoured regiments were essential, and with the armoured reconnaissance regiment should be sufficient.
- (d) The provision of some unit to hold immediate reserves of tanks and reinforcement crews was essential. Two tank delivery regiments were proposed for corps or army troops.
- (e) The present organization was three tanks per troop; General Martel favoured five. It was agreed to plan for four tanks per troop.

(C.M.H.Q. file 1/Cdn Army/1/2: Minutes of Meeting held 22 Oct 42).

95. When the armoured divisions were reorganized on the British model in January 1943, these proposals were in general put into effect. The armoured car regiments were removed from the armoured divisions to corps troops; the number of armoured regiments in each division was reduced from six to three; armoured reconnaissance regiments and a tank delivery regiment were formed out of units thus rendered surplus.

96. In the course of this reorganization some units ceased to be represented in the order of battle of the Canadian Army. The 6th Duke of Connaught's Royal Canadian Hussars, the Prince Edward Island Light Horse, and the 7th/11th Hussars had provided headquarters squadrons for divisional and brigade headquarters of 5 Cdn Armd Div. The New Brunswick Regiment (Tank) had done the same for H.Q. 1 Cdn Army Tk Bde. The headquarters squadrons for 4 Cdn Armd Div and 2 Cdn Army Tk Bde had not represented any militia unit. In the new establishment these squadrons were merged with headquarters and had no independent existence. As no officer or other rank then on the strength of 7/11 H. came from the original militia unit, no hesitation was felt in disbanding that unit completely. A proposal to perpetuate the P.E.I.L.H. and 6 H. in the personnel, other than staff, of headquarters of 4 and 5 Cdn Armd Divs respectively proved impractical (C.M.H.Q. file 1/Cdn Army/1/2: G.O.C.-in-C., First Cdn Army to C.M.H.Q. 2 Dec 42; Memorandum, D.A.G., C.M.H.Q., 5 Dec 42). Accordingly all these units were in effect disbanded, although the P.E.I.L.H. continued to exist

surplus to establishment within 11 Cdn Inf Bde pending the formation of a support group for that brigade (C.M.H.Q. file 1/Org C.A.C./1: Tel GS 2284, CAMMILITRY to DEFENSOR 15 Sep 43; see below para 163). The effect of this reorganization on individual armoured corps units and headquarters is tabulated in Appendix "B".

97. In this change the establishment of the armoured regiment was increased by four officers and 105 other ranks (Ibid: Reorganization Armoured Corps Units, 22 May 43). This was due largely to the addition of one troop in each squadron, which increased the total tanks in the unit without altering the number of three in each troop. The Canadian proposals of October 1942 would have resulted in a similar increase (C.M.H.Q. file 1/Cdn Army/1/2: Minutes of Meeting held 22 Oct 42).

98. In the army tank regiments the only change was the adoption of new unit establishments. These did not involve any important change in the organization of the unit. (Ibid: C.M.H.Q. Administrative Order No.2 10 Jan 43).

99. Only minor adjustments in unit establishments were made in the case of armoured car regiments and reconnaissance regiments (C.M.H.Q. file 1/Org C.A.C./1: Reorganization, Armoured Corps Units, 22 May 43). The two armoured car regiments were removed from the armoured divisions to corps troops replacing the reconnaissance regiments previously allotted. Instead of three reconnaissance regiments in corps and army troops there were now to be two in army troops (C.M.H.Q. file 1/Cdn Army/1/2: C.M.H.Q. Administrative Order No.2, 10 Jan 43). Only two units had as yet been chosen for this role, the Royal Montreal Regiment which was no longer required as a machine gun battalion, and 30th Reconnaissance Regiment (The Essex Regiment) which was still in Canada. The latter had recently replaced 24th Reconnaissance Regiment (Les Voltigeurs de Quebec) as the intended corps reconnaissance regiment (C.M.H.Q. file 6/R.M.R./1: Tels GSD 2334, 2341, DEFENSOR to CAMMILITRY, 12, 13 Nov 42). Action on converting the Royal Montreal Regiment had been deferred pending the revision of the composition of the army (Ibid: Tel GS 4064, CAMMILITRY to DEFENSOR, 5 Dec 42). In January 1943 they were converted to the 32nd Reconnaissance Regiment (R.M.R) C.A.C and assigned to army troops (Ibid: Tel O 706, Adv H.Q. 1 Cdn Corps to C.M.H.Q. (S.D.), 12 Jan 43; also Memorandum, Chief of the General Staff, N.D.H.Q., 29 Apr 43).

100. No further changes of importance were made in the establishments or allocations of armoured regiments, armoured car regiments, or reconnaissance regiments before the start of operations. The lack of manpower, however, led to the dropping of first one and later the second of the two reconnaissance regiments allotted to army troops. The first suggestion that these units might have to be dropped was made in March 1943 (C.M.H.Q. file 1/Cdn Army/1/3: B.G.S., C.M.H.Q. to Senior Combatant Officer, Cdn Army Overseas, 27 Mar 43). As a result of experience in exercise "SPARTAN" it was decided to delete 30 Cdn Recce Regt from the order of battle. This unit was still in Canada (Ibid: Memorandum, P.A. to G.O.C.-in-C., First Cdn Army, 6 Apr 43). Subsequently it arrived overseas and was kept for some months on a temporary basis (C.M.H.Q. file 1/Org C.A.C./1: P.A. to G.O.C.-in-C., First Cdn Army to Senior Officer, C.M.H.Q. 1 Sep 43; also Tel A. 1119, CAMMILITRY to DEFENSOR, 19 Feb 44). It was disbanded on 1 Apr 44 (C.M.H.Q. file 1/Cdn Army/1/5: Proceedings of the 8th Meeting of the Canadian Army Planning Committee, held 23 Mar 44).

101. Further difficulties with the manpower problem led to the decision in June 1943 that the remaining army reconnaissance regiment would have to be dropped (C.M.H.Q. file 1/Cdn Army/1/3: Tel GS 1502, CAMMILITRY to DEFENSOR, 26 Jun 43). The disposition of 32 Cdn Recce Regt remained in doubt for some time. This unit had come over originally with the first division as a machine gun battalion. When the other machine gun battalions were converted into divisional support battalions (see below para 162), the R.M.R. became a reconnaissance regiment (see above para 99). Now once

more they found themselves surplus to requirements. It was hoped that they could be included as a motor battalion in 2 Cdn Arm'd Bde. But this was not a normal part of an independent armoured brigade. Prior requirements for general transport companies led to the abandonment of this idea, (see above paras 86 - 88). When, however, it was proposed to disband the unit, a strong protest was made by the citizens of Westmount, Quebec. That city had lost its overseas representation in the previous war, and was now about to lose its only representation in the current field force. After further consideration it was decided that the R.M.R. should take over the army defence company from the Lorne Scots, who would still have considerable representation in the field force. This was done in April 1944 (C.M.H.Q. file 6/R.M.R./1).

102. Two new types of armoured units were formed at the beginning of 1943. In the armoured division an armoured reconnaissance regiment was created to replace the armoured car regiment. The armoured car had proved suitable for medium or long distance reconnaissance, but its limited cross-country performance made it unsatisfactory for close reconnaissance (see above para 94). The change was just being made in the British organization at the time it was adopted by the Canadians, and the establishment of the new unit was not issued until April. It consisted of a headquarters, headquarters squadron, and three reconnaissance squadrons. Each of the latter was composed of three tank troops (cruiser tanks) and three carrier troops (C.M.H.Q. file 1/Org C.A.C./1: War Office Letter, 12 Apr 43). 29th Armoured Regiment (The South Alberta Regiment) and 3rd Armoured Regiment (The Governor General's Horse Guards) were converted into armoured reconnaissance regiments for 4 and 5 Cdn Arm'd Divs respectively.

103. Towards the end of 1943 the organization of the armoured reconnaissance regiment was revised. Carriers had proved unsuitable for use with tanks and were replaced by light tanks. At the same time the squadron was reorganized with five identical troops. (Ibid: War Office Letter, 12 Oct 43). Early in 1944 the Commander-in-Chief, 21 Army Group, directed that armoured reconnaissance regiments should be equipped and organized as armoured regiments. This was to facilitate their employment as armoured regiments in support of infantry. (Ibid: Letter, C. of S., 21 Army Group, 28 Feb 44). This affected only 29 Cdn Arm'd Recon Regt, which was reorganized on this basis early in March (Ibid: Tel GS 763, CANMILITARY to DEFENSOR, 11 Mar 44).

104. The other new type of unit introduced in January 1943 was the tank delivery regiment. This unit was designed to supply reserve tanks and crews in such condition that they were immediately fit to take part in the battle. This entailed :

- (a) The provision of A.F.V.'s stowed complete in every detail and mechanically fit.
- (b) The provision of reinforcement personnel.
- (c) The "marrying-up" of vehicles and personnel in an organization where A.F.V.'s could be prepared, complete vehicles and crews could be held, and training could continue up to the last minute.

The tank delivery regiment was responsible for handling all armoured corps reinforcements, except for reconnaissance regiments which were not part of the armoured corps in the British Army at this time. The establishment, as proposed in March 1943, consisted of a headquarters capable of administering up to eight squadrons and including a headquarters squadron to hold personnel reinforcements, two heavy squadrons for each tank

brigade, and two light squadrons for each armoured brigade. The squadrons were divided into a forward squadron, working closely with the brigade it served, and a rear squadron, which would take over the vehicles from ordnance at railhead and keep the forward squadron fully supplied. Reinforcement crews were held in the squadrons as well as at headquarters. Total holdings in the unit were to be 25 per cent A.F.V.'s, 20 per cent scout cars, and 14 days personnel reinforcements (C.M.H.Q. file 1/Org C.A.C./1: Proposed W.E. - Tk Delivery Regt., 26 Mar 43; Notes on Decisions taken at Conference 23 Mar 43; Interim Notes prepared by War Office, July 1943).

105. 25 Cdn Armd Regt was converted to 25th Tank Delivery Regiment (The Elgin Regiment) C.A.C. with effect from 15 Sep 43 (Ibid: Administrative Order No. 134, 20 Sep 43). The British had changed the title from "regiment" to "unit", but in the interests of consistency in retaining former cavalry nomenclature throughout the Canadian Armoured Corps the title "regiment" was retained in the Canadian establishment (Ibid: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 2 Sep 43). Because 1 Cdn Army Tk Bde was taking part in the landing in Sicily in July 1943, 1 Cdn Tk Del Sqn was formed in May from personnel of The Elgin Regiment to serve that formation (Ibid: Administrative Order No 68 6 May 43). This was later reorganized as "A" Sqn 25 Cdn Tk Del Regt, and at the same time "B" squadron was formed to conform with the organization of the rest of the regiment (Ibid: Tel GS 2677, CANMILITRY to DEFENSOR, 29 Oct 43).

106. Early in 1944 21 Army Group recommended that the tank delivery unit should handle observation post tanks and self-propelled guns for the artillery as well. (Ibid: Tel G 195, First Cdn Army to C.M.H.Q., 25 Jan 44). The tank delivery organization was under review by the War Office at this time (Ibid: Tel O 148, First Cdn Army to C.M.H.Q., 3 Feb 44). The new organization, issued in March, changed the name of the unit to armoured delivery regiment. It provided delivery squadrons, previously on the scale of two for each armoured brigade, on the scale of one for each armoured brigade and one for each corps and army. This would make a net reduction of one squadron in the Canadian regiment if the new organization was adopted in Italy (Ibid: B.G.S., C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 14 Mar 44). 25 Cdn Tk Del Regt became 25 Cdn Armd Del Regt on 15 Mar 44 (Ibid: Administrative Order No 42, 17 Mar 44).

ARMY TANK BRIGADES

107. When 3 Cdn Army Tk Bde was formed in January 1943 out of the three armoured regiments that had become surplus to requirements, it was on a purely temporary basis. It was hoped that ultimately it might be possible to include them in the order of battle as a third army tank brigade. But in the meantime only the headquarters was authorized; the three regiments were counted as reinforcements (C.M.H.Q. file 1/Cdn Army/1/2: Tels CGS 16, CGS 39, DEFENSOR to CANMILITRY, 6, 15 Jan 43; Tel GS 85, CANMILITRY to DEFENSOR, 15 Jan 43). At that time 2 Cdn Army Tk Bde was still in Canada and did not arrive in the United Kingdom until July 1943 (Report No. 110 Hist Offr. C.M.H.Q. 20 Dec 43).

108. By March 1943 it had become apparent that it would be impossible to include three such brigades in the Canadian order of battle (C.M.H.Q. file 1/Cdn Army/1/3: Brig Rodger to Senior Combatant Officer, Cdn Army Overseas, 27 Mar 43). Moreover the experience of exercise "SEARTAN" in March 1943 convinced Lt.Gen. McNaughton that two would be sufficient (Ibid: Memorandum by P.A. to G.O.C.-in-C., First Cdn Army, 6 Apr 43). It had been agreed previously that 3 Cdn Army Tk Bde, composed of units that had been overseas for some time, would have preference over 2 Cdn Army Tk Bde which was still in Canada (C.M.H.Q. file 1/Cdn Army/1/2: Memorandum of Conversation, General McNaughton - General Stuart, 25 Jan 43).

It was, accordingly, proposed to add 3 Cdn Army Tk Bde to the order of battle, and to count 2 Cdn Army Tk Bde as reinforcements with the expectation that it would eventually have to be broken up (C.M.H.Q. file 1/Cdn Army/1/3: Minutes of Conference held at H.Q. First Cdn Army, 3 May 43).

109. There were some complications in this proposal. N.D.H.Q. wanted the brigade included in the order of battle to be called "2 Cdn Army Tk Bde" as this was authorized whereas "3 Cdn Army Tk Bde" was not. There was no objection to the three regiments of 3 Cdn Army Tk Bde being selected (Ibid: Tel GS 466, DEFENSOR to CANMILITARY, 11 May 43). It was agreed that, shortly after the arrival of 2 Cdn Army Tk Bde, 3 Cdn Army Tk Bde would be disbanded and that 2 Cdn Army Tk Bde would be reformed from the most suitable of the six available regiments (Ibid: Minutes of Conference held at H.Q. First Cdn Army, 15 Jun 43). It was also decided to reorganize the army tank brigades as armoured brigades, without the motor battalion, to facilitate the replacement of the armoured brigade in the armoured division if required (Ibid: Tel GS 1502, CANMILITARY to DEFENSOR, 26 Jun 43).

110. In July General Crerar carried out an inspection of the six regiments to determine which should be retained. He recommended that the three units² of 3 Cdn Army Tk Bde be used to form the new 2 Cdn Arm'd Bde; these were 6th Army Tank Regiment (1st Hussars), 10th Army Tank Regiment (The Fort Garry Horse), and 27th Army Tank Regiment (The Sherbrooke Fusiliers Regiment) (C.M.H.Q. file 1/Org C.A.C./1: Comd, 1 Cdn Corps to G.O.C.-in-C., First Cdn Army, 12 Jul 43). The resulting reorganization was a bit involved. H.Q., 2 Cdn Army Tk Bde was converted into H.Q. 2 Cdn Arm'd Bde. Pending the final selection of personnel to form this headquarters, personnel from H.Q. 3 Cdn Army Tk Bde were to function in this capacity. Meanwhile personnel of H.Q., 2 Cdn Army Tk Bde were to function as H.Q., 3 Cdn Army Tk Bde until it was disbanded. The three units listed above were included in 2 Cdn Arm'd Bde together with the services from 2 Cdn Army Tk Bde. The remaining three regiments, 20th Army Tank Regiment (16th/22nd Saskatchewan Horse), 23rd Army Tank Regiment (The Halifax Rifles), and 26th Army Tank Regiment (The Grey and Simcoe Foresters) were transferred to 3 Cdn Army Tk Bde (Ibid: G.S.C. 1, S.D., C.M.H.Q. to A.A.G. (Org), 21 Jul 43; also C.M.H.Q. Administrative Order No 111, 26 Jul 43).

111. The units of 3 Cdn Army Tk Bde continued to exist on a temporary basis under command of "E" Group, Canadian Reinforcement Units. They were reduced to nil strength as their personnel were absorbed as reinforcements for other units (Ibid: Memorandum by D.A.G., C.M.H.Q., 30 Jul 43; also Officer i/c Cdn Sec, G.N.Q. 2 Ech to D.A.G., C.M.H.Q., 25 Aug 43). Before their dissolution each of the regiments was addressed by Brigadier Rutherford, Commanding "E" Group. He stressed the reluctance with which this step had been taken and the desire of all concerned to make the best possible provision for the officers and men who were thus displaced. (Ibid: Talk by Brigadier Rutherford to 26 Army Tk Regt, 31 Jul 43). Not until November 1943 were they formally disbanded (Ibid: Tel GS 2841, CANMILITARY to DEFENSOR, 12 Nov 43).

112. When 2 Cdn Arm'd Bde was formed out of the two tank brigades, 1 Cdn Army Tk Bde was in action in Sicily. The reorganization of this as an armoured brigade was effected at the end of August 1943. (Ibid: Senior Officer, Cdn Sec G.H.Q. 1 Ech, 15 Army Group to Comd, 1 Cdn Army Tk Bde, 27 Aug 43). But the British in the Middle East were using establishments different from those in use in the United Kingdom. It was desirable for the Canadians to use these establishments for the same reasons that had

² These had all been serving as armoured regiments until the reorganization of January 1943 and were now army tank regiments in little more than name only.

led to the adoption of British establishments the previous January. There was, however, considerable difficulty in authorizing establishments when the British originals were not always immediately available at C.M.H.Q. (Ibid: Memorandum, G.S.O. 1, S.D., C.M.H.Q., 24 Sep 43). The course taken was to authorize the reorganization of the units on the current Middle East establishment, whatever it might be, and to add Canadian increments to cover necessary differences (Ibid: GS 2242, CANMILITRY to DEFENSOR, 12 Nov 43).

ARTILLERY

113. The allotment of field and medium artillery proposed for the Canadian Army during 1942 was :

- (a) Three field regiments in each infantry division.
- (b) Two field regiments in each armoured division.
- (c) Five field regiments in army troops.
- (d) Five medium regiments in army troops.

(C.M.H.Q. file 1/Cdn Army/2: Composition Cdn Army Overseas, Third Proposal, 5 Aug 42).

Of these, four field regiments were still required from Canada (Ibid: Brig G.S., First Cdn Army to B.G.S., C.M.H.Q., 22 Jul 42).

114. The reorganization in January 1943 did not greatly affect field and medium artillery. One field regiment was dropped from the requirements for army troops; otherwise there was no change except for minor adjustments to establishments (C.M.H.Q. file 1/Cdn Army/1/2: Organization, First Cdn Army, 2 Dec 42; Tel GS 455, CANMILITRY to DEFENSOR, 1 Mar 43). Heavy artillery was to be provided entirely by the British (C.M.H.Q. file 1/Org Arty/1: Memorandum by G.S.O. II, S.D.1, C.M.H.Q., 10 Jul 43).

115. During 1942 it had been decided to equip with self-propelled guns one of the two field regiments proposed for an armoured division. These were 25-pr guns on a Ram chassis produced in Canada. Two of the new regiments forming in Canada, 19 and 23 Cdn Fd Regts, were allotted to this role (C.M.H.Q. file 1/Cdn Army/1/2: Memorandum, Proposed Order of Battle Canadian Army Overseas, 23 Dec 42). It was intended that they should stay in Canada until training with their self-propelled equipment was well advanced (Ibid: Tel GS 4218, CANMILITRY to DEFENSOR, 28 Dec 42). Meanwhile, on the suggestion of the War Office, provisional establishments for this new type of unit were drawn up in Canada. The only experience of the British with self-propelled artillery had been in unusual conditions with the First and Eighth Armies in Africa (C.M.H.Q. file 1/Org Arty/1: Tel GS 776, CANMILITRY to DEFENSOR 10 Apr 43). This had not been with the 25-pr Ram which was now adopted as standard equipment. An original proposal to designate these two regiments as R.C.H.A., on the erroneous assumption that this would be following British practice, was opposed by the Canadian Army Overseas, and soon discarded (Ibid: Tel GSD 750, DEFENSOR to CANMILITRY, 9 Jun 43; Tel GS 1940, CANMILITRY to DEFENSOR, 12 Aug 43; Tel GSD 1088, DEFENSOR to CANMILITRY, 19 Aug 43).

116. In July 1943 the British revised the scale of artillery for army troops to provide a higher proportion of medium regiments. The new scale was one medium regiment for each division and one field and one medium regiment for each corps (Ibid: War Office Letter, 4 Jul 43). On this basis the Canadian Army required two army field regiments and seven medium regiments. There were available three and five respectively.

21 Cdn Fd Regt, which would have been the fourth army field regiment, had already been dropped from the proposed order of battle for manpower reasons. (C.M.H.Q. file 1/Cdn Army/1/3: Tel GS 1502, CANMILITARY to DEFENSOR, 26 Jun 43). It was now decided to convert 7 Cdn Fd Regt to 7 Cdn Med Regt; the British undertook to provide the remaining medium regiment (C.M.H.Q. file 1/Org Arty/1: P.A. to G.O.C.-in-C., First Cdn Army to Senior Officer C.M.H.Q., 31 Jul 43; Memorandum by Director of Staff Duties, War Office, 30 Aug 43). 21 Cdn Fd Regt was disbanded in September, soon after its arrival overseas (Ibid: Tel GS 2397, CANMILITARY to DEFENSOR, 27 Sep 43).

117. When 5 Cdn Armd Div went to Italy 8 Cdn Army Fd Regt replaced 19 Cdn Fd Regt, becoming the self-propelled regiment with that division. (Ibid: Tel GS 2611, CANMILITARY to DEFENSOR, 22 Oct 43). For service in that theatre, however, they were equipped with 105 mm guns (Ibid: Senior Officer, C.M.H.Q. to Senior Combatant Officer, Cdn Army in the U.K., 16 Oct 43). 19 Cdn Fd Regt was allotted to army troops.

118. The field regiments of 3 Cdn Inf Div were temporarily re-organized as self-propelled regiments for the assault landing in Normandy in June 1944 (Ibid: Tel GS 2643, CANMILITARY to DEFENSOR, 26 Oct 43). They reverted to their normal establishment once the initial phase had been completed. For the assault 19 Cdn Fd Regt served with 3 Cdn Inf Div also but later served with 4 Cdn Armd Div and other formations; it remained as a self-propelled regiment. Apart from such temporary adjustments for special circumstances there were no further changes in the organization of field and medium artillery.

119. At the end of August 1943 the Army Commander stated at a staff conference that, although no arrangements existed for air observation posts to be provided from Canadian sources, if they were available from British sources First Cdn Army would gladly accept them. This was in order to conform to policy in 21 Army Group (Ibid: Extract from Army Comd's Conference, 30 Aug 43). Three such squadrons were allotted to First Cdn Army to be available by December 1943 (Ibid: Director of Air, War Office to Senior Officer C.M.H.Q., 28 Sep 43). This was a reversal of previous policy within First Cdn Army.* A suggestion by Lt. Gen. Crerar, in February 1942, that they should be considered, as the British were then introducing them, had not been acted upon (C.M.H.Q. file 1/Cdn Army/1: Tel GS 449, CANMILITARY to DEFENSOR, for McNaughton from Crerar, 7 Feb 42).

120. In April 1944 the War Office informed C.M.H.Q. that they would be forced to withdraw the air observation post squadrons allotted to First Cdn Army, and suggested that they be replaced from Canadian sources (C.M.H.Q. file 1/Org Arty/1/2: Memorandum, Director of Staff Duties, War Office, 5 Apr 44). This additional commitment was agreed to by the Canadian Army, and plans were made to provide three squadrons. The Royal Canadian Air Force undertook to supply the necessary ground crews (Ibid: Chief of Staff, C.M.H.Q., to Under Secretary of State, War Office, 27 Apr 44). The three squadrons were authorized at the beginning of May 1944 (Ibid: Administrative Order No 78, 8 May 44). But it would take six months to train the squadrons before they would be ready for action. There was considerable discussion whether these squadrons should be considered as belonging to the Army or the Air Force. In December 1944, before the first had seen action, they were formally recognized as being R.C.A.F. (C.M.H.Q. file 1/Org Arty/1/3: Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 15 Jan 45).

121. Canadian plans in 1942 had been to have a single survey regiment, on a large establishment, in army troops. British policy was to have one smaller unit in each corps (C.M.H.Q. file 1/Cdn Army/2: Notes of a Conference held at C.M.H.Q., 18 Jul 42). With the general reorganization in January 1943 it was planned to have a survey regiment in each corps on the

* See Preliminary Narrative, The History of the Canadian Military Forces Overseas, Chap XIV, paras 168, 184, 186 and reference notes.

British establishment; the second regiment would be formed out of surplus personnel from the first (C.M.H.Q. file 1/Cdn Army/1/2: C.M.H.Q. Administrative Order No. 2, 10 Jan 43). But in April the Army Commander was still intending to retain the existing Canadian organization, and stated that G.H.Q. Home Forces was considering its adoption (C.M.H.Q. file 1/Org Arty/1: Extract from Memorandum of Meeting, held 13 Apr 43). No progress was made in this latter proposal, and in July it was agreed to adopt the British organization, with certain Canadian amendments (Ibid: Record of Meeting, held 26 Jun 43). As the British were still considering revision, no action was taken until October, when the impending departure of 1 Cdn Corps for Italy made the reorganization necessary (Ibid: Memorandum by S.D., C.M.H.Q., 4 Aug 43; also Tel G3 2614, CANMILITRY to DEFENSOR, 22 Oct 43).

122. The organization of anti-tank regiments underwent a number of changes between 1942 and 1944. The matters to be decided were the number of batteries to be included in a regiment, and the way in which two new weapons would be fitted into the organization.

123. In June 1942 Lt. Gen. McNaughton recommended the adoption of the new British organization of three batteries each of four 6-pr troops. This was a reduction of one battery per regiment. A factor in this decision was the introduction of 2-pr anti-tank guns in the infantry battalion (C.M.H.Q. file 1/Cdn Army/1: G.O.C.-in-C., First Cdn Army to Senior Officer, C.M.H.Q., 12 Jun 42). This new organization was approved by N.D.H.Q. at the end of July, and it was proposed to form one of the new field regiments that were required from the surplus anti-tank batteries (Ibid: Tel G3D 1582, DEFENSOR to CANMILITRY, 1 Aug 42). But Canadian opinion overseas now favoured retaining the former four-battery organization, and it was suggested by Lt. Gen. McNaughton that one troop per battery should be equipped eventually with 17-pr guns (C.M.H.Q. file 1/Cdn Army/2: Notes of Conference held 18 Jul 42; also Brig G.3., First Cdn Army to B.G.3., C.M.H.Q., 22 Jul 42).

124. The reorganization on British establishments at the beginning of 1943 led once more to the adoption of the three-battery regiment (C.M.H.Q. file 1/Cdn Army/1/2: Organization, First Cdn Army, 2 Dec 42). But the British organization was itself under review (Ibid: War Office Comments on Draft Order of Battle, December 1942). On the basis of unanimous recommendations from Generals Wavell, Wilson, and Alexander, a regiment of 48 guns, organized in four batteries, was proposed. This was the same number of guns as in the already authorized three battery regiment. General McNaughton said that as he "had long held the same view" the Canadian Army would adopt this new organization. He now urged that the 17-pr gun be kept for corps anti-tank regiments (Ibid: Memorandum, G.O.C.-in-C., First Cdn Army, 10 Jan 43).

125. In January 1943, the old British establishments were adopted within First Cdn Army, but four batteries were retained in each regiment, for a total of 64 guns (C.M.H.Q. file 1/Org Arty/1: Reorganization, R.C.A. Units, 17 May 43). In April one battery in each regiment was converted to use 17-pr guns which were just becoming available (Ibid: B.G.3., First Cdn Army to Senior Officer, C.M.H.Q., 14 Apr 43; also Senior Officer, C.M.H.Q. to H.Q. First Cdn Army, 19 Mar 43). 1 Cdn A.Tk Regt in 1 Cdn Inf Div retained 6-prs in all four batteries for the landing in Sicily in July (Ibid: B.G.3., C.M.H.Q. to A.D.A.G. (A), 26 Apr 43).

126. The new British establishments, which finally became available in July, provided two different types of unit. Besides the new 17-pr gun, they took into account a self-propelled anti-tank gun now introduced for the first time. For infantry divisions the British anti-tank regiment would consist of four similar batteries each having one troop equipped with 17-pr guns and two with 6-prs; for armoured divisions and corps troops the anti-tank regiment would have two batteries equipped with 6-pr guns and two batteries

with 3-in self-propelled guns (Ibid: War Office Letter, 4 Jul 43). The recently adopted Canadian organization differed from both of these. It was decided to adopt the British organization for corps and armoured divisional regiments, and after further discussion also that for infantry divisional regiments (Ibid: Senior Officer, C.M.H.Q. to Secretary, Department of National Defence, 7 Sep 43; also G.O.C.-in-C., First Cdn Army to Senior Officer C.M.H.Q., 10 Sep 43).

127. The consequent reorganization, which took place in October, involved only five regiments. 1 Cdn A.Tk Regt in Italy had already adopted the British organization within the Eighth Army (Ibid: Senior Officer, C.M.H.Q. to Secretary, Department of National Defence, 7 Sep 43). For the assault landing in Normandy 3 Cdn A.Tk Regt in 3 Cdn Inf Div was to be organized temporarily on a special establishment, which included some self-propelled guns (Ibid: Tel GS 2811, CANMILITRY to DEFENSOR, 9 Nov 43). 2 Cdn A.Tk Regt adopted the new organization for an infantry divisional regiment; 4, 5, 6 and 7 Cdn A.Tk Regts were reorganized on that for armoured divisions and corps troops (Ibid: Tel GS 2590, CANMILITRY to DEFENSOR, 21 Oct 43; Tel GS 3132, CANMILITRY to DEFENSOR, 15 Dec 43).

128. Early in 1944 the organization changed once more, this time to provide an increased number of 17-pr guns. The 6-prs in armoured division and corps regiments were all replaced by 17-prs; in infantry divisional regiments two troops per battery instead of one were to be equipped with this heavier weapon (Ibid: War Office Letter, 14 Jan 44). The British proposed to meet the increased manpower requirement by reducing the number of regiments; this was not possible within the Canadian Army and a total increase had to be accepted (Ibid: Chief of Staff, C.M.H.Q. to Secretary, Department of National Defence, 19 Jan 44). Nos 2, 5, and 6 Cdn A.Tk Regts were reorganized on the above basis in March 1944; the three regiments in Italy were governed by establishments in that theatre, while 3 Cdn A.Tk Regt remained on its special establishment (C.M.H.Q. file 1/Org Arty/1/2: Tel GS 814, CANMILITRY to DEFENSOR, 16 Mar 44; Tel GS 866, CANMILITRY to DEFENSOR, 21 Mar 44).

129. As in the case of anti-tank regiments, in 1942 the British had reorganized their light anti-aircraft regiments on a basis of three batteries per regiment. First Cdn Army proposed to retain a four-battery organization, with ten more guns per regiment. To compensate for this, one less regiment would be provided than was called for on the British scale (C.M.H.Q. file 1/Cdn Army/2: Notes of Conference, held 18 Jul 42). But the War Office pointed out the difficulty that would ensue if any interchange of units within the Anglo-Canadian force should be necessary (Ibid: Director of Staff Duties, War Office to C.M.H.Q., 18 Sep 42). Accordingly, it was decided to adopt the British organization and, as a consequence, to increase the total number of regiments from eight to nine (Ibid: Brig G.S., First Cdn Army to Senior Officer, C.M.H.Q., 16 Oct 42).

130. The conversion was carried out in conjunction with the general reorganization in January 1943. A fourth battery was left temporarily with the light anti-aircraft regiments in each of the three infantry divisions (C.M.H.Q. file 1/Cdn Army/1/2: C.M.H.Q. Administrative Order No 10, 22 Jan 43). 11 Cdn L.A.A. Regt was formed shortly afterwards from these three batteries and allotted to army troops. (Ibid: Memorandum of Conversion, General McNaughton - General Stuart, 25 Jan 43; also Tel GS 402, CANMILITRY to DEFENSOR, 24 Feb 43). The distribution was now one regiment in each division, one in each corps, and two in army troops: 2 Cdn H.A.A. Regt was also allotted to army troops; no important changes took place in the organization of this latter unit. The remaining anti-aircraft units required for Army, G.H.Q. and L. of C. troops were provided by the British (Ibid: Tel GS 4221, CANMILITRY to DEFENSOR, 28 Dec 43).

131. At the end of 1943 one troop per battery was reorganized to use 40-mm self-propelled guns (C.M.H.Q. file 1/Org Arty/1: B.C.S. First Cdn Army to C.M.H.Q. 11 Dec 43). Early in the next year, as a result of

the conversion of support battalions to machine-gun battalions, one 20-mm troop was added to each battery (C.M.H.Q. file 1/Org Arty/1/2: B.G.S., C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 10 Mar 44; Tel G3 816 CANMILITARY to DEFENSOR, 16 Mar 44). Both these changes applied only to units within 21 Army Group.

132. In February 1944 because of demands on the available manpower some reduction in existing units was necessary (above paras 36-38). As the British now had some surplus anti-aircraft units released from the Air Defence of Great Britain, it was decided to disband 7 and 11 Cdn L.A.A. Regts, the two units in army troops (C.M.H.Q. file 1/Cdn Army/1/4: Chief of Staff, C.M.H.Q. to Under Secretary of State, War Office, 2 Feb 44). This was done in April (C.M.H.Q. file 1/Org Arty/1/2: C.M.H.Q. Administrative Order No 71., 24 Apr 44).

ENGINEERS

133. The basic engineer unit was the field company, or in an armoured division the field squadron. The standard allotment in divisional or corps troops was a headquarters controlling three field companies and a field park company, in an armoured division there were only two field squadrons and a field park squadron but no headquarters. Towards the end of 1942 the British introduced a common establishment for field companies and squadrons, but retained the name "squadron" for use in armoured divisions; elsewhere it was "company". At the same time they renamed the main sub-division of a company "platoon"; the term "section" previously in use had led to confusion, as in other parts of the army this regularly denoted a smaller sub-unit. Squadrons continued to be divided into "troops" (C.M.H.Q. file 1/Org Engr/1: Memorandum by Director of Staff Duties, War Office, 28 Nov 42). This nomenclature was adopted by the Canadian Army along with the British establishments in the early part of 1943 (Ibid: Senior Officer, C.M.H.Q. to Under-Secretary of State, War Office, 10 Jul 43). The principle of calling a subaltern's command a "platoon" or "troop" was later extended to all other types of engineer unit (C.M.H.Q. file 1/Org Engr/1/2: War Office Letter, 12 Aug 44).

134. The slightly varying requirement in corps and divisional engineers led to the adoption of two small units, a bridging platoon or troop added to divisions, and an electrical and mechanical section, later platoon, added to corps or army troops. This permitted the retention of the standard organization throughout. (C.M.H.Q. file 1/Org Engr/1: Senior Officer, C.M.H.Q. to G.O.C.-in-C. First Cdn Army, 16 Aug 43). With this minor amendment the engineer component of corps and divisions was fixed on an establishment which permitted free interchange between the two.

135. In Army, G.H.Q. and L. of C. troops there was a wide variety of engineer units. Proposals in the summer of 1942 included five engineer battalions, four road construction companies, two tunnelling companies, three bomb disposal companies, two mechanical equipment companies, a workshop and park company, a survey company and depot, and a chemical warfare group of two companies (C.M.H.Q. file 1/Cdn Army/2: Composition Cdn Army Overseas, Third Proposals., 5 Aug 42). With the revision in composition of First Cdn Army at the beginning of 1943, many of the engineer services in rearward areas were assumed by the British. The Canadians no longer planned to provide any bomb disposal units, and all responsibility for general labour passed to the British. There was also a general reduction in the number of units the Canadians would provide (C.M.H.Q. file 1/Org Engr/1: Senior Officer, C.M.H.Q. to Headquarters, First Cdn Army, 8 Jun 43 and 8 Jul 43). But the ultimate composition of the engineer component was not yet settled (Ibid: Memorandum by S.D.1, C.M.H.Q., 7 Jun 43).

136. After exercise "SPARTAN" the Chief Engineer, First Cdn Army, recommended that two of the engineer battalions should be converted into six field companies for army troops. This would be twice as many as were currently proposed in British organization (Ibid: Memorandum by Chief Engineer, First Cdn Army to G. (S.D.), 25 Mar 43). The engineer battalion was a distinctively Canadian unit, which performed the same function as field companies and artizan works companies of the Royal Engineers (Ibid: Senior Officer, C.M.H.Q. to Senior Combatant Officer, Cdn Army in the U.K., 16 Nov 43). At the end of April 4 Bn R.C.E. was disbanded and the personnel used to form one field park company and three field companies for army troops (Ibid: Tel GS 1010, CANMILITRY to DEFENSOR, 5 May 43). The three battalions that remained were allotted to L. of C. troops. The allotment of engineers to army troops was subsequently raised by the British to correspond with the requirements outlined by the Chief Engineer, First Cdn Army. The additional field companies were supplied by the British. In March 1944, in order that the army troops of First Cdn Army should be composed as far as practicable of Canadian units, 1 Bn R.C.E. was similarly disbanded and three additional field companies, a field park company and headquarters were formed. These were allotted to army troops and the British units withdrawn to G.H.Q. troops (C.M.H.Q. file 1/Org Engr/1/2: C.-in-C., 21 Army Group to Under Secretary of State, War Office, 25 Feb 44, also Tel GS 761, CANMILITRY to DEFENSOR, 11 Mar 44).

137. There was considerable doubt in the early part of 1943 whether the two chemical warfare companies, then training in Canada, would be required. The Army Commander was very anxious that they should be retained if possible, although the British had dropped all such units from their field force (C.M.H.Q. file 1/Org Engr/1: Senior Officer, C.M.H.Q. to First Cdn Army, 18 Mar 43; also Tel GS 647, CANMILITRY to DEFENSOR, 27 Mar 43). This view was repeated in June when the question was raised as to the desirability of moving the companies to Suffield, Alberta, to complete their training (Ibid: Tel GS 1273, CANMILITRY to DEFENSOR, 2 Jun 43). In August it became impossible to retain these companies within the manpower ceiling either in Canada or the United Kingdom. General McNaughton was, therefore, compelled to agree to their disbandment (Ibid: Record of a Meeting held in the Office of the Minister of National Defence at C.M.H.Q., 4 Aug 43). They were disbanded on 31 Aug 43 (Ibid: Tel AG 5261, DEFENSOR to CANMILITRY, 18 Sep 43).

138. In February 1943 the War Office again stressed the extreme shortage of railway troops in the United Kingdom (see Preliminary Narrative, The History of the Canadian Military Forces Overseas Chap I para 26, Chap VIII paras 3-6, Chap IX para 99; also C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 437, CANMILITRY to DEFENSOR, 27 Feb 43). It was not possible to provide them from Canadian resources overseas, accordingly Canada was asked to form the necessary engineer and signals units for despatch in the late spring. This was done (C.M.H.Q. file 1/Org Engr/1: Tel AG 3060, DEFENSOR to CANMILITRY, 5 Apr 43).

139. Canadian Engineer survey organization had consisted of one survey company in army troops. The British had adopted a scale of one company headquarters for each corps with a number of specialist sections. The Army Commander favoured the existing enlarged company rather than two separate companies. (Ibid: Senior Officer, C.M.H.Q. to First Cdn Army, 18 Mar 43). There was, however, a desire for an increase in the total survey establishment. This, coupled with the general principle of conformity with British organization, led to the adoption of three company headquarters and specialist sections. This was higher than the British scale but based on the same organization (Ibid: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 8 May 43; C.M.H.Q. Administrative Order No 82, 29 May 43; also C.M.H.Q. file 1/Cdn Army/1/3: B.G.S., C.M.H.Q. to Senior Combatant Officer, Cdn Army Overseas, 27 Mar 43).

140. One small part of this survey organization merits a special note. 30 Cdn Air Survey Liaison Section was originally formed to act as a briefing unit for a R.C.A.F. squadron to be used for systematic air photography. The squadron did not materialize, and all such work was done by R.A.F. photographic reconnaissance units briefed by a British air survey liaison section. The Canadian section, meanwhile, did valuable work in preparation for the assault landing in Normandy, determining beach gradients etc. from air photographs. When this work was completed, the Directorate of Military Survey, War Office, desiring to use the highly-trained personnel, requested that they be allowed to use this section in preparation for operations in the Far East (C.M.H.Q. file 1/Org Engr/1/2: Brigadier M. Hotine to Chief of Staff, C.M.H.Q., 12 May 44). This special request was granted, and a new air survey liaison section was formed for First Cdn Army (Ibid: Chief of Staff, C.M.H.Q. to G.O.C.-in-C. First Cdn Army, 26 May 44).

141. In August 1943 the British transferred all equipment repair workshops to R.E.M.E., leaving only the "manufacturing" workshops in engineer units (C.M.H.Q. file 1/Org Engr/1: Letter, Chief Engineer, First Cdn Army to Senior Officer, C.M.H.Q., 17 Sep 43). This new organization was adopted by the Canadian Army in November. As there was as yet no corps corresponding to R.E.M.E. in the Canadian Army, the engineer mechanical equipment workshops were absorbed by the R.C.O.C. (Ibid: Senior Officer, C.M.H.Q. to Senior Combatant Officer, Cdn Army Overseas, 18 Nov 43).

142. The Canadians retained the remaining two engineer battalions, their two tunnelling companies, and two road construction companies, none of which had any counterpart in the British Army (Ibid: Chief Engineer, First Cdn Army to Senior Officer, C.M.H.Q., 17 Sep 43). Early in 1944 the two tunnelling companies were converted into drilling companies (Ibid: Memorandum by S.D.1, C.M.H.Q., 17 Jan 44).

143. There was some discussion early in 1944 over the amount of engineer services that would be required in the United Kingdom after the start of operations. These had been pared down drastically in the interests of manpower economy. As no British labour was available the Canadians depended entirely on their own engineers for all construction and repairs to their military establishments in the United Kingdom. At the insistence of the Deputy Quartermaster General, C.M.H.Q., a larger allotment was made. A provisional addition to the manpower ceiling was authorized to take care of this (C.M.H.Q. file 1/Org Engr/1/2: D.Q.M.G., C.M.H.Q. to B.G.S., 14 Jan 44; Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 22 May 44).

144. In April 1944 the War Office introduced a Headquarters Army Group R.E. (A.G.R.E.). There were a large number of engineer units grouped in army troops, G.H.Q. reserve, and L. of C. Previously these had had to be administered by the C.R.E. of the formation to which they were allotted, whose headquarters was equipped to deal only with the basic allotment of units. The intention was that these additional units within 21 Army Group would be grouped into six A.G.'s R.E. of which the Canadians would provide one. The new headquarters would act as the permanent administrative control of the units allotted to it, and in addition would be available to assume operational control of special tasks as required (Ibid: C.-in-C., 21 Army Group to Under-Secretary of State, War Office, 31 Mar 44; also Circular on Emp of A.G.R.E., Chief of Staff, First Cdn Army, 14 Jun 44). In accordance with this, H.Q. 1 Cdn A.G.R.E. was formed in April (Ibid: Tel G3 1233, CANMILITRY to DEFENSOR, 27 Apr 44).

SIGNALS

145. The essential basis of signals organization was the section designed to serve a particular unit or formation. As there were almost

as many types of such sections as there were types of units served, it would be tedious to list them in detail. Within the division the organization of signals, like that of the division, was fairly definite. New establishments were adopted in January 1943 and again in May of that year, but no important change took place in the organization of either infantry or armoured divisional signals. (C.M.H.Q. file 1/Org Sigs/1: C.G.S. to C.M.H.Q. 17 May 43; also Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 29 May 43).

146. Corps and Army Signals were based largely on a number of standard sections provided in varying numbers according to the requirements of the formation. These were principally line, operating, maintenance, wireless and despatch rider sections (Ibid: Director of Signals, War Office, 5 Jan 44). For administrative purposes they were grouped into companies, the whole being under a signals headquarters for the formation. In general the allotment planned in 1942 remained unchanged (see Appendix "A"). In addition sections were allotted for each artillery and armoured corps regiment in corps or army troops. The number of these naturally varied with the number of such regiments allotted.

147. In April 1943 the War Office suggested that they would welcome the provision by the Canadians of a L. of C. signals (C.M.H.Q. file 1/Cdn Army/1/3: Director of Staff Duties, War Office to C.M.H.Q., 9 Apr 43). It was planned to include four such units, all provided by the British, in the combined British and Canadian force. But the War Office found itself short of the necessary tradesmen. There had been discussions with the Chief Signals Officer of the First Cdn Army with a view to having the Canadians supply one signals unit for the lines of communication in return for more general labour from the British (Ibid: B.G.S., C.M.H.Q. to Senior Combatant Officer, Cdn Army Overseas, 27 Mar 43). As the R.C. Sigs had roughly enough trained personnel available, it was agreed to accept this commitment. The question of where the necessary compensation would be made was left for future decision (C.M.H.Q. file 1/Org Sigs/1: Memorandum by A.A.G. (Org), C.M.H.Q., 15 Apr 43; also G.O.C.-in-C., First Cdn Army to Senior Officer C.M.H.Q. 21 Apr 43). This meant an addition of about 1200 men to the Canadian Force component of the Field; the organization was similar to that for corps and army signals. The formation of the L. of C. signals was completed by the following September (Ibid: Tel GS 2277, CANMILITRY to DEFENSOR, 14 Sep 43).

148. Pigeon detachments, which had been included in the proposed composition of the Canadian Army throughout 1942 and 1943, were dropped early in 1944 as such units were no longer to be included below Army Group (C.M.H.Q. file 1/Cdn Army/1/4; A./G.O.C.-in-C., First Cdn Army to Chief of Staff, C.M.H., 29 Dec 43).

149. In order to provide communication with the supporting air force, an Air Support Control Signals was included in army troops. Two such units were planned in the early part of 1943 (C.M.H.Q. file 1/Org Sigs/1: Tel GS 1202, CANMILITRY to DEFENSOR, 26 May 43). In January 1944 these were combined into a single Air Support Signals Unit (A.S.S.U.), with an enlarged establishment (Ibid: Chief of Staff, C.M.H.Q. to General Officer Commanding, First Cdn Army, 11 Jan 44).

150. A special combined signals and intelligence organization was included for the purpose of wireless interception. Their duties included interception, direction-finding, and the production of intelligence information therefrom. They did not include monitoring our own communications for which a special Wireless Security Section was provided (Ibid: Senior Officer, C.M.H.Q. to Senior Combatant Officer, Cdn Army in the U.K., 15 Dec 43). The work of the Wireless Interception ("Y")

organization was under the direction of the Intelligence Staff (Ibid: Notes on Wireless Interception Organization in the Field, 26 May 43). The Canadian part of this organization consisted of one Special Wireless Section and one Wireless Intelligence Section for Army Headquarters and one of each for each corps (Ibid: Tel GS 1391, CANMILITRY to DEFENSOR, 14 Jun 43; also Memorandum by G.S.O.1, S.D., C.M.H.Q., 13 Aug 43).

INFANTRY

151. The infantry battalions within the Canadian Army Overseas at the beginning of 1942 comprised nine for each of three infantry divisions and one for 5 Cdn Arm'd Div. There were also two motor battalions in the latter division. During 1942 one infantry and two motor battalions arrived with 4 Cdn Arm'd Div (C.M.H.Q. file 1/Cdn Army/1: Proposed Composition, Canadian Army (Field Force) in the United Kingdom, 16 Jan 43). The machine gun and headquarters defence units will be dealt with below (paras 159-165).

152. At the beginning of 1943 the reorganization of the two armoured divisions included an increase in infantry battalions from one to three for each division. Only one of the two motor battalions was retained (see above paras 22-29). The additional infantry for 5 Cdn Arm'd Div were provided by the conversion of one of the motor battalions, The Perth Regiment, and the transfer of the Irish Regiment of Canada from 4 Cdn Arm'd Div. The infantry brigade for 4 Cdn Arm'd Div was not completed immediately. The Princess Louise Fusiliers were converted from motor to infantry and two new battalions were requested from Canada. For this purpose The Algonquin Regiment and Les Voltigeurs de Quebec, who were converted from a reconnaissance regiment, were sent overseas (C.M.H.Q. file 1/Cdn Army/1/2: Tel GSD 81, DEFENSOR to CANMILITRY, 18 Jan 43). It was agreed that if the Voltigeurs were not "up to the standard required for a lorried infantry unit, the Army Commander would transfer them to another formation in exchange for a good infantry battalion". (Ibid: Memorandum of Conversation, General McNaughton - General Stuart, C.G.S., N.D.H.Q., 25 Jan 43). In May 1943 The Lincoln and Welland Regiment and The Argyll and Sutherland Highlanders of Canada were sent overseas to count as infantry reinforcements (C.M.H.Q. file 1/Cdn Army/1/3: Tel GS 1026, CANMILITRY to DEFENSOR, 7 May 43). In July The Princess Louise Fusiliers were converted into a brigade support group for 5 Cdn Arm'd Div, thus leaving three vacancies for infantry battalions in 4 Cdn Arm'd Div. (C.M.H.Q. file 1/Org Inf/1: G.O.C.-in-C., First Cdn Army to G.O.C., 2 Cdn Corps, 31 Jul 43). The units chosen were The Algonquin Regiment, The Lincoln and Welland Regiment, and The Argyll and Sutherland Highlanders of Canada (Ibid: Tel PA 137, First Cdn Army (P.A.) to Senior Officer, C.M.H.Q., 18 Aug 43). Les Voltigeurs de Quebec were disbanded in November 1943 (Ibid: Tel GS 2841, CANMILITRY to DEFENSOR, 12 Nov 43).

153. The principle of sending formed infantry battalions overseas as reinforcements was continued. In June 1943 The New Brunswick Rangers came over in this way; they eventually were converted into a brigade support group for 10 Cdn Inf Bde of 4 Cdn Arm'd Div (see below para 163). But a later proposal to send over The Prince Edward Island Highlanders on the same basis was turned down by First Cdn Army (C.M.H.Q. file 1/Cdn Army/1/3: Minutes of a Conference held at H.Q. First Cdn Army, 15 Jun 43). In May 1944 four battalions came over with the 13th Canadian Infantry Brigade, and a fifth subsequently joined them (C.M.H.Q. file 1/Cdn Army/1/5: Memorandum, S.D. & T., C.M.H.Q. to D.C.G.S., 23 May 44; C.M.H.Q. file 1/Org Inf/1: D.C.G.S., C.M.H.Q. to D.A.G., 4 Sep 44; General Staff Submission No 285, 7 Nov 44). At the end of the year 14 and 15 Cdn Inf Bdes arrived also as reinforcements, and other individual units proceeded overseas in 1944 and 1945 on the same basis (C.M.H.Q. file 1/Org Inf/1:

Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 9 Dec 44; General Staff Submission No 452, 30 Jan 45; General Staff Submission No 559, 14 Mar 45). A list of the units which never found a place in the order of battle is given in Appendix "D".

154. In January 1943 owing to the difficulties of maintaining adequate reinforcements for each of the infantry units, it was decided to reorganize the infantry reinforcement units on a territorial basis. They had previously been grouped according to the divisions of First Cdn Army. The intention of this new step was to classify all infantry reinforcements as belonging to a Canadian Infantry Corps rather than to particular units, thus facilitating their distribution as required. General McNaughton pointed out that he was fully appreciative of the need for regtl spirit and of the difficulties which the organization of the inf corps would produce, but he said that the prime consideration was the provision of adequate reinforcements which could take their place in the field units on short notice. (C.M.H.Q. file 1/Cdn Army/1/2; Minutes of a Conference held at H.Q. First Cdn Army, 10 Jan 43).

155. The establishment of the infantry battalion was subjected to considerable experiment and adjustment during 1942 and 1943. The then existing organization consisted of four rifle companies and a headquarters company composed of signal, anti-aircraft, 3-in mortar, carrier, pioneer, and administration platoons. In June 1942 it was decided to add 2-pr anti-tank guns to their equipment (C.M.H.Q. file 1/Cdn Army/1: Tel GS 1998, CANMILITRY to DEFENSOR, 12 Jun 42). This involved the addition of an anti-tank platoon. During the year experiments were carried out to incorporate this addition and to re-group headquarters company into an administration wing and a support company (C.M.H.Q. file 5/Inf Bn/1: Tel GS 3278, CANMILITRY to DEFENSOR, 19 Sep 42).

156. When British establishments were adopted at the beginning of 1943, that for the infantry battalion was still not firm (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 4260, CANMILITRY to DEFENSOR, 2 Jan 43). That this uncertainty was due largely to disagreement within the War Office and the British Government over the main outlines is apparent from General McNaughton's reports of conversations with senior British officers. His report of a talk with Lt.Gen. R.M. Weeks (D.C.I.G.S., War Office) on 9 Jan 43 was as follows :

I told General Weeks of my talk on 8 January 1943 with Major-General R. Godwin-Austen and the doubt which had been thrown on the British intention in respect of the organization of the inf bn and the bde sp coy, etc. General Weeks said that he was definitely of the opinion that the project would be approved, despite the opposition which it had evoked in certain political circles. He said he did not accept these contrary views; that he was certain that General Paget, C.-in-C. Home Forces, and the C.I.G.S. were in favour of the proposed reorganization and that it was the intention to press the matter to a conclusion.

(Ibid: Memorandum by P.A. to G.O.C.-in-C., First Cdn Army, 10 Jan 43).

A conversation the following day with Maj-Gen A. Galloway (D.S.D., War

Office) was reported as follows :

He said that the War Office intended to go ahead to implement their proposals for the reorganization of the inf bn and for the creation of Inf Bde Sp Coys etc. He referred to the information given me by Major-General Godwin-Austen, that the Prime Minister had objected to this reorganization and said that the basis on which this objection had been taken was incorrect; that this would be pointed out and cleared and that the conclusion by C.I.G.S. and C.-in-C., Home Forces, was firm. We would be well advised to proceed.

(Ibid: Memorandum by G.O.C.-in-C., First Cdn Army, 10 Jan 43). The ground for the objections mentioned is not recorded.

157. The organization expected consisted of three rifle companies, a headquarters company composed of signal and administration platoons, and a support company composed of 3-in mortar, carrier, anti-tank, and pioneer platoons (Ibid: Reorganization - Infantry, 25 Jan 43). This organization was officially adopted by the Canadian battalions in January 1943 (Ibid: C.M.H.Q. Administrative Order No 18, 27 Jan 43). The reduction in number of rifle companies was designed largely to save manpower. In this new organization the anti-aircraft platoon had been dropped, and the support elements had been separated from the administrative elements of the old headquarters company.

158. But new British proposals in April 1943 returned to a four rifle company basis (C.M.H.Q. file 1/Org Support/1: Tel GS 826, CANMILITARY to DEFENSOR, 16 Apr 43). The battalions of 1 Cdn Inf Div were immediately reorganized with four companies once more before they departed for Sicily in July (C.M.H.Q. file 1/Org Inf/1: P.A. to G.O.C.-in-C., First Cdn Army to Senior Officer, C.M.H.Q., 30 Apr 43). The remaining infantry battalions regained their fourth rifle company during July 1943 (Ibid: Memorandum, G.S.O. 1, S.D., C.M.H.Q. to A.A.G. (Org), 16 Jul 43). From this point there were no further changes of importance in the infantry organization.

MACHINE GUN, SUPPORT, AND DEFENCE UNITS

159. Probably no part of the army underwent such marked changes between 1942 and 1944 as did the infantry support and protective elements. At the beginning of 1942 there were in the Canadian Army Overseas four machine gun battalions, one in each infantry division and one in army troops. The Lorne Scots (Peel, Dufferin, and Halton Regiment) provided a defence platoon for each formation headquarters, with a company at corps headquarters (C.M.H.Q. file 1/Cdn Army/1: Proposed Composition Canadian Army (Field Force) in the United Kingdom, 16 Jan 42).

160. This organization was under discussion throughout the summer of 1942. The introduction of 4.2-in mortars and 20-mm guns had produced a need for a unit to operate these weapons (Ibid: Tel GS 1998, CANMILITARY to DEFENSOR, 12 Jun 42). The eventual proposal was to provide support battalions for each infantry division by the conversion of the former machine gun battalions. These would consist of a battalion headquarters, a divisional support company with 20-mm guns, and three brigade support companies each with 20-mm guns and heavy mortars; there was no provision for medium machine guns. These support battalions would absorb the former

divisional and brigade defence and employment platoons. The army machine gun battalion (R.M.R.) was to be converted into a corps reconnaissance regiment. The Lorne Scots would provide similar support companies for corps and army headquarters in place of the former defence companies. The question of support elements for armoured divisions was not yet settled (Ibid: Tel GS 3544, CANMILITRY to DEFENSOR, 25 Sep 44). This organization was authorized by N.D.H.Q. in November 1942, but was never actually put into effect (C.M.H.Q. file 1/Cdn Army/2: Tel GS 2334, DEFENSOR to CANMILITRY, 12 Nov 42).

161. Before action had been taken, however, to form these support battalions and companies, the general reorganization on British establishments took place. The War Office had not yet decided the details of the support organization, and accordingly the Canadian reorganization was held in abeyance (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 67, CANMILITRY to DEFENSOR, 11 Jan 43). The general outlines, however, were clear. It was very similar to the Canadian proposal. There was to be a battalion headquarters and a brigade support group equipped with medium machine guns, 20-mm guns, and heavy mortars (4.2-in) for each infantry brigade; defence platoons for division and brigade headquarters would be supplied in addition (Ibid: Tel GS 4260, CANMILITRY to DEFENSOR, 2 Jan 43). Meanwhile steps were taken to train the machine gun battalions to use their two new weapons (Ibid: Minutes of a Conference held at H.Q. First Cdn Army, 10 Jan 43).

162. Preliminary establishments became available in April 1943, and steps were taken immediately to convert the three Canadian machine gun battalions, The Saskatoon Light Infantry, The Toronto Scottish Regiment, and The Cameron Highlanders of Ottawa, into support battalions, on the above organization, for the three infantry divisions. The British policy of retaining a separate defence platoon for brigade headquarters was not followed; such platoons were absorbed in the brigade support groups (C.M.H.Q. file 1/Org Support/1: Memorandum by G.S.O.2, S.D.1, C.M.H.Q., 5 Apr 43; also Tel GS 963, CANMILITRY to DEFENSOR, 2 May 43). The Royal Montreal Regiment (M.C.) had already been converted into a reconnaissance regiment (see above para 99). No steps were taken as yet to form support groups for the new infantry brigades in 4 and 5 Cdn Armd Divs (C.M.H.Q. file 1/Cdn Army/1/3: Minutes of Conference held at H.Q. First Cdn Army, 3 May 43).

163. The support elements for the two armoured divisions were among the last places to be filled in the order of battle of the Canadian Army. There were a number of candidates. In 5 Cdn Armd Div the Prince Edward Island Light Horse, who had originally provided the headquarters squadron for 1 Cdn Armd Bde, continued for a time as the support company for 11 Cdn Inf Bde (see above para 96). But this position was never authorized, as the formation of all support units had been held in abeyance until the details had been settled at the War Office. Later The Lincoln and Welland Regiment and The Argyll and Sutherland Highlanders of Canada were considered for this role (C.M.H.Q. file 1/Org Support/1: A.D.A.G.(A), C.M.H.Q. to B.G.3., 22 Jun 43). At the end of July 1943 it was decided to complete 5 Cdn Armd Div as soon as possible. For this purpose The Princess Louise Fusiliers, a former motor battalion in 4 Cdn Armd Div, were selected by the Army Commander to provide the support group for 11 Cdn Inf Bde in view of the advanced state of their training (Ibid: G.O.C.-in-C., First Cdn Army to Senior Officer, C.M.H.Q., 31 Jul 43; also C.M.H.Q. file 1/Cdn Army/1/3: Tel GS 2284, CANMILITRY to DEFENSOR, 15 Sep 43). This left the P.E.I.L.H. surplus to requirements. In September an urgent enquiry came from the Minister of National Defence concerning the fate of this unit (C.M.H.Q. file 1/Org Support/1: Tel GS 1206, DEFENSOR to CANMILITRY, 10 Sep 43). It was a matter of policy "that every province in Canada be represented in and easily identifiable as part of the Fighting Forces of Canada's Overseas Army" (Ibid: Tel GS 1112, DEFENSOR to CANMILITRY,

24 Oct 43). It was pointed out that to disband the P.E.I.L.H. "would be to eliminate the only unit overseas which bears P.E.I. name and further it would leave P.E.I. as the only province not recognized in Overseas set-up by assignment of unit with territorial name associated with province" (Ibid: Tel GS 2390, DEFENSOR to CANMILITRY, 17 Sep 43). A suggestion that the support group for 10 Cdn Inf Bde in 4 Cdn Armd Div might be formed from the P.E.I.L.H. was rejected on the ground that this would eliminate The New Brunswick Rangers (Ibid: Tel GS 2584, CANMILITRY to DEFENSOR, 20 Oct 43). This unit had recently arrived overseas in order to be broken up for reinforcements (C.M.H.Q. file 1/Cdn Army/1/3: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 10 Jun 43). It was decided that The New Brunswick Rangers should form the support group for 10 Cdn Inf Bde, and that the P.E.I.L.H. should take over 2 Cdn Corps Def Coy from the Lorne Scots. The latter unit would still be represented in the order of battle (C.M.H.Q. file 1/Org Support/1: Senior Officer, C.M.H.Q. to Senior Combatant Officer, Cdn Army in the U.K., 26 Oct 43.).

164. In January 1944 the Commander-in-Chief, 21 Army Group, requested the War Office to convert the support battalions of that force to machine gun battalions. These units would consist of three companies of medium machine guns and one company of 4.2-in mortars. The 20-mm guns would be removed to the divisional light anti-aircraft regiments (Ibid: Tel O. 123, First Cdn Army to C.M.H.Q., 14 Jan 44; see above para 131). This new organization was accepted by First Cdn Army. The support battalions of 2 and 3 Cdn Inf Divs were converted once more into machine gun battalions, and the support group of 10 Cdn Inf Bde into an independent machine gun company in February (Ibid: B.G.S., C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 22 Feb 44). The corresponding change was made by Canadian units in Italy the following July (Ibid: Tel GS 2490, CANMILITRY to A.A.I. for CANDEX, 21 Aug 44).

165. The headquarters defence companies and platoons continued to be mainly Lorne Scots. But in the course of the various changes in support organization, the question of what companies and platoons they would provide was long unsettled. The defence company for 1 Cdn Corps remained unchanged. A similar company for 2 Cdn Corps was formed in January 1943 (C.M.H.Q. file 1/Cdn Army/1/2: C.M.H.Q. Administrative Order No 9, 21 Jan 43). An army defence company had already been formed. In November 1943 the P.E.I.L.H. took over 2 Cdn Corps Def Coy (above para 163). The following April the R.M.R. took over the army defence company (above para 101). In April 1945 this latter was increased to a battalion (C.M.H.Q. file 6/R.M.R./1: General Staff Submission No 695, 27 Apr 45). The divisional defence and employment platoons remained unchanged throughout. In May 1943 the brigade defence platoons had been absorbed in the various support groups on the instructions of the Army Commander (C.M.H.Q. file 1/Org Support/1: Minute on Memorandum, Senior Officer, C.M.H.Q., to G.O.C.-in-C., First Cdn Army, 23 Apr 43). The British continued to regard them as separate units, but were expected to absorb them later in the support groups (Ibid: Tel GS 1843, CANMILITRY to DEFENSOR, 2 Aug 43). But when the machine gun battalions replaced the support units in February 1944, it became necessary to reinstate the brigade defence platoons as separate units (Ibid: B.G.S., C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 22 Feb 44). When the army defence company was taken over by the R.M.R., these brigade ground defence platoons became once more Lorne Scots (Ibid: Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 11 Apr 44).

SUPPLIES AND TRANSPORT

166. At the beginning of March 1942 the Canadian Army adopted the new British organization for the Royal Army Service Corps (C.M.H.Q. file 6/Reorg R.C.A.S.C./1: C.M.H.Q. Administrative Order No 58, 27 Feb 42). The new organization introduced greater simplicity and flexibility into the supply and transport service. The principle was to use a few standard

sub-units which could be grouped into companies as required for the various tasks to be performed. The basic element was a transport platoon of thirty vehicles. Companies formed of varying numbers of these would include in addition a specialist platoon containing the tradesmen required in accordance with the task of the company, a workshop platoon, and one or more relief driver increments (Preliminary Narrative, The History of the Canadian Military Forces Overseas, Chap XI, paras 177-180).

167. In the organization as adopted in March 1942 the R.C.A.S.C. units serving infantry divisions and corps troops were grouped, as previously into three "commodity" companies, ammunition, petrol, and supply. But the British in the Middle East were using composite companies, one company for each brigade performing all three tasks (C.M.H.Q. file 6/Reorg R.C.A.S.C./1: War Office Letter, 12 Nov 41). This system was in general use in armoured divisions including Canadian. In April 1942 the question was raised whether this system might be adopted for the Canadian infantry division (Ibid: Tel G-3 740, DEFENSOR to CANMILITARY, 11 Apr 42). The War Office had not as yet decided their policy; also at this time the whole divisional organization was being reviewed. It was proposed to wait until these two matters were settled (Ibid: Senior Officer, C.M.H.Q. to H.Q. First Cdn Army, 15 May 42).

168. In August it was decided to adopt this new grouping within the Canadian Army Overseas (Ibid: Tel G-3 3124, CANMILITARY to DEFENSOR, 2 Sep 42). There was, however, considerable delay before authority for the reorganization could be obtained from Ottawa (Ibid: Chief of the General Staff, N.D.H.Q. to Senior Officer, C.M.H.Q., 30 Nov 42). In any event it was incorporated in the general reorganization at the beginning of 1943 (Ibid: C.M.H.Q. Administrative Order No 6, 14 Jan 43). No further changes took place in the basic organization of second line R.C.A.S.C. units.

169. The second-line transport authorized for the Canadian Army in 1942 had consisted of three "commodity" companies in each infantry division, four composite companies in each armoured division, one composite company for each army tank brigade, three "commodity" companies for corps troops in 1 Cdn Corps, and one composite company was planned for each of 2 Cdn Corps and Army Troops. In addition one platoon was provided for each artillery regiment in corps and army troops (C.M.H.Q. file 1/Cdn Army/1: Proposed Composition, Canadian Army (Field Force), 16 Jan 42). After the reorganization in January 1943 the companies in infantry divisions were increased from three to four, one for each brigade and one for divisional troops, but there was no great increase in personnel. At the same time the companies in armoured divisions were reduced from four to three, when the support group was eliminated. The proposed total for corps troops remained at four, two composite companies for each corps. For army troops, army tank brigades, and artillery regiments there was no change. Most of these changes had been included in the "Third Proposal" in August 1942, but did not take effect until 1943 (C.M.H.Q. file 1/Cdn Army/1/2: C.M.H.Q. Administrative Order No 2, 10 Jan 43). The composition of each company in this organization is shown in Appendix "C". There were minor alterations from time to time; the composition shown was that ultimately adopted.

170. Third line transport consisted of general transport companies. These were on the scale of one for each division and one for each corps. They were grouped under a headquarters of a corps transport column. The third-line companies for divisions were variously regarded as army or corps troops or even as divisional troops, but the scale of provision never changed (C.M.H.Q. file 6/Reorg R.C.A.S.C./1: Notes on Divisional and Corps Troops R.A.S.C. Organization, October 1942).

171. Additional corps R.C.A.S.C. units were motor ambulance convoys and Bridge companies, one of each for each corps. The motor ambulance convoys were transferred from the R.C.A.M.C. to the R.C.A.S.C. in

January 1943 in order to conform with British practice (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 4242, CANMILITRY to DEFENSOR, 31 Dec 42). They were based on the same organization as other R.C.A.S.C. units. The two corps bridge companies, which were later transferred to army troops, had a distinct organization (C.M.H.Q. file 1/Org R.C.A.S.C./1: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 12 Jul 43; Memorandum by Director of Staff Duties, War Office, 2 Sep 43). This organization was not settled until August 1943 (Ibid: Tel GS 2038, CANMILITRY to DEFENSOR, 23 Aug 43). In February 1944 a new organization was adopted for a corps headquarters. This involved the formation of a corps car company R.C.A.S.C. to hold and administer the transport of corps headquarters. (Ibid: B.G.S., C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 7 Feb 44).

172. Other R.C.A.S.C. units found in army troops included tank transporter companies and troop carrying companies. The latter were similar in organization to the third line general transport companies. The number of each that it was intended to provide varied from time to time. At the beginning of 1943 three of each were planned (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 455, CANMILITRY to DEFENSOR, 1 Mar 43). But after exercise "SPARTAN" in March of that year it was decided that one tank transporter company would suffice for First Cdn Army (C.M.H.Q. file 1/Org R.C.A.S.C./1: G.O.C.-in-C., First Cdn Army to Senior Officer, C.M.H.Q., 29 Mar 43). This view remained unchanged when the British proposed to increase their provision of these companies (Ibid: Memorandum by Director of Staff Duties, War Office, 13 May 43; also Senior Officer, C.M.H.Q. to Under-Secretary of State, War Office 29 Jun 43). The other two tank transporter companies were converted into general transport companies, and were in fact the only two provided in army troops in addition to the divisional third line companies (Ibid: Senior Officer, C.M.H.Q. to Senior Combatant Officer, Canadian Army in the U.K., 29 Nov 43). Two further general transport companies were provided for G.H.Q. troops at the pressing request of the British early in 1944. These were originally intended for army troops, but had not been formed. In January 1944 it was proposed to drop them, as they were not required under a new policy of pooled transport (C.M.H.Q. file 1/Cdn Army/1/4: Proceedings of the 7th Meeting of the Canadian Army Planning Committee, 12 Jan 44). But the British were counting on these two companies for the total transport requirements of 21 Army Group, and the Canadian Army felt bound to supply them (Ibid: Tel GS 581, CANMILITRY to DEFENSOR, 23 Feb 44).

173. The R.C.A.S.C. also provided in army troops a mobile petroleum laboratory, and among L. of C. units a mobile printing section and an advanced stationery depot. The last two, included in the plans since 1942, were formed in December 1943 (C.M.H.Q. file 1/Org R.C.A.S.C./1: Tels GS 3149, GS 3170, CANMILITRY to DEFENSOR, 16, 18 Dec 43). The mobile petroleum laboratory was first included in the plans in February 1943, and was formed the following May (Ibid: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 17 May 43).

174. One innovation made in 1942 should be noted. In August of that year as an experiment all reinforcement cooks were concentrated in the army service corps reinforcement unit. Transfers to the R.C.A.S.C. were not compulsory. This system simplified such matters as training and the even distribution of cooks among the various corps (C.M.H.Q. file 6/Reorg R.C.A.S.C./1: Tel A 974, CANMILITRY to DEFENSOR, 26 Mar 43). This arrangement proved most satisfactory, and in May 1943 all cooks in the Canadian Army Overseas were transferred to the R.C.A.S.C. (Ibid: Tel GS 831, CANMILITRY to DEFENSOR, 16 Apr 43). A Cooks' and Butchers' Wing was formed at No 1 CASGRU to train and hold such personnel.

MEDICAL AND DENTAL SERVICES

175. The medical organization proposed at the beginning of 1942

consisted of :

- (a) Within the divisional area one field ambulance for each brigade, organized to provide a main dressing station and two companies.
- (b) In corps troops a total of three motor ambulance convoys.
- (c) In army troops one casualty clearing station for each division served.
- (d) In L. of C. troops eight general hospitals to provide 7200 beds, a neurological hospital, and two convalescent depots.

Additional hospitals were provided as static units in the United Kingdom. Medical services also included field hygiene sections for each division, corps, and army, mobile hygiene and bacteriological laboratories and an advanced depot for medical stores in army troops (C.M.H.Q. file 1/Cdn Army/1: Proposed Composition, Canadian Army (Field Force), 16 Jan 42). The field ambulances and field hygiene sections for armoured formations were more mobile and distinguished as "light."

176. In July 1942 the War Office announced a decision to revise their medical services in the field to ensure greater flexibility, adequate intercommunication, sufficient transport for casualties, and adequate surgical facilities in the forward areas. To these ends the field ambulance would become a fully mobile collecting and evacuating unit, with the main dressing station removed. The rest of their organization and the scale of provision remained unchanged, and no change at all was proposed for the light field ambulance. A new unit, the field dressing station, was introduced to perform the function of a main dressing station; there would be one of these for each field ambulance. A second new unit, the field surgical unit, was created. There would be two for each division in the field held available for allotment as required. They would normally function at a field dressing station. The motor ambulance convoys were to be transferred to the army service corps, but would remain under the operational control of the medical service. A 200-bed general hospital was introduced for location in the area of railhead (C.M.H.Q. file 6/Reorg Med/1: War Office Letter, 6 Jul 42).

177. The Canadian Army considered these new proposals, but did not feel it advisable to adopt them all. The two main criticisms were that the new field ambulance was not suitable for both infantry and armoured formations, and that the motor ambulance convoy was removed from the medical corps. An experimental organization for a field ambulance had been developed within the Canadian Army which it was thought would be suitable for both infantry and armoured formations. Like the British, it involved the removal of the main dressing station to a separate unit. It was proposed to provide four field ambulances for each infantry division and three for each armoured division, an increase over previous provision. Otherwise the British organization and scale of provision were in general accepted (Ibid: A Memorandum of a Meeting for Discussion of Changes in British Military Medical Organization in the Field 30 Jul 42: also G.O.C.-in-C., First Cdn Army to C.-in-C., Home Forces, 17 Aug 42). It was desired, where practicable, to maintain uniformity with British organization, but the Canadian Army at this time had a completely different divisional organization from the British and some modifications in the medical services would inevitably be necessary. It was felt that if changes were to be made they should be such as were applicable to the Canadian divisional organization (Ibid: Reorganization of the Medical Services, 2 Aug 42).

178. A Canadian organization for medical services was tried out in exercise "SAWBONES" at the end of October 1942 (Ibid: D.M.S., C.M.H.Q., to D.D.M.S., 1 Cdn Corps, 7 Nov 42). This organization included a single type of field ambulance for both infantry and armoured formations, the field dressing stations and field surgical units borrowed from the British organization, and an amalgamation of the field hygiene section with the mobile bath unit. This latter had formerly been an ordnance unit, and in the British Army continued so to be (Ibid: Memorandum, Proposed Reorganization, Canadian Medical Services, 5 Sep 42).

179. Before the Canadian Army had definitely settled its own version of the new medical organization, the general adoption of British establishments became Canadian policy (C.M.H.Q. file 1/Cdn Army/1/2: Organization, First Cdn Army, 2 Dec 42). The objection was made that in the case of medical services this would need more men than if the Canadian organization were followed (Ibid: Organization of R.C.A.M.C., First Cdn Army, 4 Dec 42). The difference was not considered sufficient to warrant a departure from general policy in this particular case. The changes from the existing organization, which were made in January 1943, were:

- (a) In each infantry division the conversion of the field ambulances to the British type, and the addition of two field dressing stations.
- (b) In each armoured division the conversion of one light field ambulance to a field ambulance, and one light field ambulance to a field dressing station. The light field hygiene section became a field hygiene section.
- (c) In corps troops the existing field ambulances were converted to field dressing stations.
- (d) The motor ambulance convoys were transferred to R.C.A.S.C.
- (e) The mobile bath units were transferred to R.C.O.C. and combined with mobile laundries.

(C.M.H.Q. file 6/Reorg Med/1: C.M.H.Q. Administrative Order No 4, 13 Jan 43).

180. The British scale of provision of hospital beds was 6% with the expeditionary force and 4% in the United Kingdom (C.M.H.Q. file 1/Cdn Army/1/2: Minutes of Meeting held 11 Nov 42). The Canadian proposals would provide a slightly larger number of beds.* It was pointed out that the British, in addition to the military hospital beds which they allowed, had also a large number of Ministry of Health beds. The Canadians had no similar provision closer than Canada. Apart from the inconvenience of moving hospital cases over such a distance, more hospital ships than the one currently provided would be necessary (C.M.H.Q. file 1/Org Med/1: Memorandum, D.M.S., C.M.H.Q. to D.A.G., 2 Apr 43). The total provision planned was two 200-bed, five 600-bed, and seven 1200-bed hospitals to serve with the field force. In the United Kingdom there would be ten further hospitals organized on static establishments ranging from 600 to 1200 beds. In March 1943 there were altogether nine general hospitals overseas, of which seven were on static establishments (Ibid: Tel GS 620, CANMILITARY to DEFENSOR, 26 Mar 43). Until the Canadian Army got into action there was no need to increase this provision. Two further hospitals were already mobilized in Canada and a further six were mobilized in May 1945. The formation of the remaining seven was deferred until the need for them arose (Ibid: Memorandum by Chief of the General Staff, N.D.H.Q., 17 May 43). A further review of the hospital situation in September 1943 led to the conclusion that the above provision was not

* See also Preliminary Narrative, The History of the Canadian Military Forces Overseas, Chap XLV, paras 135-149.

excessive. It approximated closely to the provision by the Americans, whose position was similar. Further the division of the Canadian forces in two theatres meant that adequate reserves of accommodation had to be provided in each theatre (Ibid: Tel GS 2430, CANMILITRY to DEFENSOR, 1 Oct 43). The ten hospitals in the United Kingdom had all been placed on static establishments. In addition to the general hospitals there were three convalescent depots allotted to the field force, and a further convalescent depot, a convalescent hospital, an officers' convalescent home, a C.W.A.C. convalescent home, a special hospital, and a neurological and plastic surgery hospital in the United Kingdom (Ibid: Memorandum by D.Q.H.C., C.M.H.Q., 13 Mar 44).

181. In February 1943 the suggestion was made by N.D.H. that the Canadian Army should copy the Americans in using medical corps personnel for unit stretcher-bearers. This would ensure that better trained men would be available for the job (C.M.H.Q. file 6/Reorg Med/1: Tel GS 237, DEFENSOR to CANMILITRY, 20 Feb 43). Any change of this sort was rejected as inadvisable at that stage of the war, particularly as the British had no intention of adopting it (C.M.H.Q. file 1/Org Med/1: Memorandum, A.M.D.1, C.M.H.Q. to D.M.S., 11 Jun 43).

182. Certain special medical units might be noticed. A neuro-surgical unit was provided to operate with one of the general hospitals in the Field Force for the treatment of head injuries and neurological conditions of all kinds (C.M.H.Q. file 6/Reorg Med/1: War Office Letter, 19 Dec 42; also C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 455, CANMILITRY to DEFENSOR, 1 Mar 43). At one time it was considered that four mobile optical units would be needed. One such unit was mobilized in January 1943. But the British Army provided optical facilities by the inclusion of specially trained personnel in base and advanced depots for medical stores. Accordingly the one unit was disbanded in May 1943 (C.M.H.Q. file 1/Org Med/1: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 2 Aug 43). In July 1943 it was proposed to add a research laboratory R.C.A.M.C. to investigate and develop advanced methods of treatment, particularly with regard to shock and wound infection. This unit was formed in August 1943 (Ibid: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 21 Aug 43). When the Canadian forces went to Italy, a need arose for anti-malarial control units. Three such units were formed on a temporary basis before the departure of 1 Cdn Inf Div for Sicily; two others were subsequently added (Ibid: Tel AGO 1611, FLAMBO from CANDEX to CANMILITRY, 25 Jan 44; Tel GS 774, CANMILITRY to DEFENSOR, 13 Mar 44).

183. The Canadian Dental Corps worked closely with the R.C.A.M.C. and might be included here. Total provision for the Canadian Army Overseas was eight dental companies with the Field Force, each comprising 20 clinical detachments, and three base dental companies in the United Kingdom, each comprising 30 clinical detachments. Detachments from the base companies were attached to general hospitals and casualty clearing stations in the field force. This caused administrative complications, and accordingly one base company was deleted and the personnel permanently allotted to the hospitals concerned. (Ibid: Senior Officer, C.M.H.Q. to Senior Combatant Officer, Cdn Army in U.K., 19 Oct 43). Early in 1943 base and army depots for dental stores were added to the composition of the Army. Previously medical stores depots had handled dental stores, but this had not proved satisfactory (C.M.H.Q. file 1/Cdn Army/1/3: B.G.S., C.M.H.Q. to Senior Combatant Officer, Cdn Army Overseas, 27 Mar 43). The whole of this dental organization was peculiarly Canadian (Ibid: Memorandum, D.A.G., C.M.H.Q. to B.G.S., 3 Aug 43).

R.C.O.C. AND R.C.E.M.E.

184. The Ordnance organization proposed for the Canadian Army at the beginning of 1943 was :

(a) First line:

- (i) Light aid detachments, one to each of a number of units and formations
- (ii) Light anti-aircraft ordnance workshop sub-sections, one to each light anti-aircraft battery.

(b) Second line:

- (i) In each infantry division, one divisional ordnance workshop and one divisional ordnance field park.
- (ii) In each armoured division, two armoured brigade ordnance companies and one support group ordnance company.
- (iii) In each tank brigade, one tank brigade ordnance company.
- (iv) In corps and army troops, a total of two non-divisional ordnance workshops and two non-divisional ordnance field parks.

(c) Third line:

- (i) In armoured corps troops, two divisional sections of an armoured corps ordnance workshop, an armoured corps ordnance field park, two army tank ordnance workshops, and two army tank ordnance field parks.
- (ii) In army troops, two army ordnance workshops and two army ordnance field parks.

(d) Fourth line:

One base ordnance workshop and one base ordnance depot.

(C.M.H.Q. file 1/Cdn Army/1: Proposed Composition, Canadian Army (Field Force), 16 Jan 42).

This corresponded to the current British organization* (C.M.H.Q. file 6/Ord Reorg/1: War Office Security letter, 10 May 41; Extract, War Office W.E.C. 668, 3 Dec 41). The division of work was as follows:

- (a) First line: minor repairs
- (b) Second line: assembly exchange
- (c) Third line: assembly repair by component exchange
- (d) Fourth line: complete assembly overhaul.

* See also Preliminary Narrative, The History of the Canadian Military Forces Overseas, Chap XI paras 126-129.

(Ibid: Notes for Meeting with A.C.I.G.B. on R.A.O.C. Repair Organization, 9 Apr 41). Ordnance services also included salvage units, mobile bath units, and mobile laundry and forward decontamination units.

185. In March 1942 the British were considering reorganizing ordnance services in infantry formations on the same lines as those in armoured divisions. This would involve abolishing the divisional ordnance workshop and field park, and putting in their place three brigade ordnance companies each containing both workshop and field park elements (C.M.H.Q. file 6/Ord Reorg/1/2: Extract from the Proceedings of the 24th Monthly Meeting of Dominion Representatives, held 3 Mar 42). Adoption of this was delayed while the new divisional organization was uncertain (Ibid: Tel G3 1773, CANMILITARY to DEFEN CR, 25 May 42). The new proposals were accepted in Canadian Army Plans. The following organization for second line services was recommended, and was incorporated in the proposed composition of August 1942:

- (a) In each infantry division, three ordnance companies one for each brigade.
- (b) In each armoured division, two armoured ordnance companies and one ordnance company, the latter replacing the support group company,
- (c) In each tank brigade, an armoured ordnance company replacing the tank brigade company,
- (d) In each corps, two ordnance companies replacing the non-divisional workshop and field park.
- (e) In army troops, four ordnance companies, an added requirement.

(Ibid: Tel G3 3409, CANMILITARY to DEFENSOR, 2 Oct 43).

186. The above organization was never put into effect. Before it had been fully accepted the British had revised their ordnance services once more. With the intention of concentrating technicians within a single organization they had formed a new Corps of Royal Electrical and Mechanical Engineers. This corps took over the repair services of the ordnance and the army service corps, and it was intended that the engineer repair service would also be included. In view of this they abandoned the idea of a unit which would be performing partly continuing ordnance services and partly the new R.E.M.E. services (Ibid: Memorandum, D.D.O.S., First Cdn Army to D.A. & Q.M.G., 14 Jun 42). The Canadian Army adopted one aspect of this new principle in August 1942, when the supply and repair of R.C.A.S.C. vehicles was transferred from that corps to the R.C.O.C. (Ibid: Overseas Routine Order No 2413). The transfer of engineer repairs was delayed by the British, and consequently by the Canadians, until the following year (Ibid: Memorandum, A/D.Q.M.G., C.M.H.Q. to A.D.Q.M.G., 18 Jun 43).

187. When British establishments were adopted at the beginning of 1943, the Canadian ordnance service was still on the organization in force a year before. The new British organization with its separate R.E.M.E. corps was considerably different, both from this and from the Canadian proposals of the previous summer. It was recommended by the Army Commander that the British organization be adopted, but without the separate corps (C.M.H.Q. file 1/Cdn Army/1/2: Reorganization, First Cdn Army, 2 Dec 42). This view was concurred in by the heads of Ordnance Services, who emphasized the desirability of conforming with British practice. The problems of supply would be greatly complicated by any divergence (Ibid: Memorandum, A.D.Q.M.G., C.M.H.Q. 8 Dec 42). The resultant changes in unit organization were extensive

The first line services remained substantially the same. The second and third line units were converted as follows :

- (a) In infantry divisions, the divisional ordnance workshop was split into three infantry brigade workshops.
- (b) In armoured divisions, the two armoured brigade companies became a single armoured brigade workshop, the support group company became an infantry brigade workshop, in each case with the field park element removed.
- (c) In tank brigades, the tank brigade ordnance company remained for the time being, as the British had no corresponding establishment.
- (d) In corps troops, the non-divisional ordnance workshops became corps troops workshops.
- (e) In third line workshops, the two army ordnance workshops became three infantry troops workshops, and the two divisional sections of the armoured corps ordnance workshop became two armoured troops workshops. These five units, one for each division, were included among corps troops.
- (f) The field parks of second and third line were combined. Out of the various existing units were created three infantry and two armoured divisional sub parks, one for each division, which were included among corps troops. In addition two corps and army troops sub parks were retained from the old non-divisional field parks.
- (g) A second line workshop was added to army troops.

(Ibid: C.M.H.Q. Administrative Order No. 2, 10 Jan 42). 43?

188. Certain other changes appeared at this time. In each division and corps a new headquarters was formed for the various workshops. For these the name, Headquarters R.E.M.E., was borrowed from the British, although there was as yet no Canadian corps of that name (Ibid: Tel G3 67, CANMILITARY to DEFENSOR, 11 Jan 43). The mobile bath units, which had been in the R.C.A.M.C. during the past year, were transferred back to Ordnance and combined with mobile laundries in order to conform with British practice.

189. There were no further changes in the general ordnance organization. But a few additions or amendments were made within second and third line units. A third line workshop and a field park were added for each army tank brigade (C.M.H.Q. file 1/Cdn Army/1/3: Tel G3 823, CANMILITARY to DEFENSOR, 15 Apr 43). The tank brigade ordnance company became a tank brigade workshop, and with the conversion of the brigade to an armoured brigade it became an armoured brigade workshop (C.M.H.Q. file 1/Org Ord/1: G.S.O.1, S.D., C.M.H.Q. to A.A.G. (Org), 21 Jul 43). In May 1944 an army troops ordnance sub park was added (C.M.H.Q. file 1/Cdn Army/1/5: Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 26 May 44).

190. Attention, as far as organizational planning was concerned, was mainly directed on the extent to which Canadians would provide fourth line services. It was proposed to retain the Base Ordnance Workshop, and to provide in addition two advanced components for the field force. The

first of the latter was formed in March 1943 (C.M.H.Q. file 1/Org Ord/1: Tel GS 736, CANMILITRY to DEFENSOR, 6 Apr 43). The second was formed a few months later (Ibid: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 30 Jun 43).

191. Original proposals were for similar provision by the Base Ordnance Depot. But in view of the large numbers of men required, it was hoped that the British would contribute all the general labour for the B.O.D. and the labour and most of the tradesmen for the two advanced components (C.M.H.Q. file 1/Cdn Army/1/2: Tel GS 455, CANMILITRY to DEFENSOR, 1 Mar 43). The result would be that only 10 per cent of the whole main component, and 20 per cent of the non-labour portion of the advanced components would be Canadian. This proposal, however, was not accepted by the War Office. They suggested instead that the Canadians should supply one advanced B.O.D. complete (C.M.H.Q. file 1/Cdn Army/1/3: Organization, Cdn Army Overseas, 27 Mar 43). This was agreed to by the Canadian Army. Meanwhile the source of the labour for the main component was still undecided (Ibid: Memorandum, Organization, Cdn Army Overseas, 6 Apr 43). In June the effort to reduce rearward services led to a proposal to delete the Canadian Base Ordnance Depot and rely entirely on British services. This was opposed by Ordnance Services, and a modified B.O.D. was suggested to provide those services considered to be essentially Canadian. This would consist of :

- (a) Headquarters.
- (b) M.T. and Technical Stores sub-depot to ensure that the base ordnance workshop was adequately supplied with "B" vehicle spare parts and stores.
- (c) A vehicle sub-depot to receive, store, and issue all "A" and "B" vehicles received from Canada.
- (d) A boot repair shop to operate existing facilities for the repair of Canadian boots.

(Ibid: Memorandum, D.Q.M.G., C.M.H.Q. to Senior Officer, 24 Jun 43).

This was agreed to. (Ibid: D.A.G., C.M.H.Q. to A.D.A.C.(A), 26 Jun 43). The new proposed organization was put into effect in January 1944, when the unit was renamed Canadian Central Ordnance Depot (C.M.H.Q. file 1/Org Ord/1: Tel GS 195, CANMILITRY to DEFENSOR, 20 Jan 44).

192. Some changes or additions were made in other ordnance units. In April 1943 two recovery companies were formed (Ibid: Senior Officer, C.M.H.Q. to H.Q. First Cdn Army, 16 Apr 43). A third recovery company was added in May 1944 (C.M.H.Q. file 1/Cdn Army/1/5: Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 26 May 44). In September 1943 the number of salvage units was reduced from eight to four (C.M.H.Q. file 1/Org Ord/1: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 30 Sep 43). In November of that year two mechanical equipment workshops were formed, when this former Engineer service was transferred to Ordnance to conform with British practice. The British had concentrated all these technical services in their R.E.M.E. corps; in the Canadian Army this was still included in the R.C.O.C. (Ibid: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 18 Nov 44). Some mention might be made of an important temporary organization. In September 1943, 1st Canadian Equipment Assembly Company was formed to cope with the large quantity of Canadian vehicles waiting to be uncrated and assembled (Ibid: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 7 Sep 43). Five more such companies were added in October, using personnel from C.A.C.,

R.C.A.S.C., and R.C.O.C. (Ibid: Senior Officer, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 8 Oct 43).

193. In February 1944 authority was granted by the Canadian Privy Council to form a corps of Canadian Electrical and Mechanical Engineers, effective 1 Feb 44 (C.M.H.Q. file 1/Org R.C.E.M.E./1: Tel AG 1917, DEFENSOR to CANMILITRY, 4 Mar 44). The title "Royal" was granted by the King in April (Ibid: Tel AG 4625, DEFENSOR to CANMILITRY, 2 May 44). The appropriate units were transferred from the Royal Canadian Ordnance Corps to the Royal Canadian Electrical and Mechanical Engineers on 15 May 44. These were :

- (a) All H.Q.s R.E.M.E.
- (b) All workshops
- (c) All light aid detachments
- (d) Recovery companies
- (e) A small arms inspectorate, a M.T. inspectorate and a servicing unit.

(Ibid: Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 9 May 44). The formation of the new corps was a little more than the logical outcome of the adoption of a British organization based on the existence of such a corps. The organizational changes had all been made within the Canadian Army before the formation of the new corps.

INTELLIGENCE CORPS

194. In April 1942 the Army Commander agreed to the formation of a Canadian Intelligence Corps. But he stipulated that officers temporarily posted to intelligence duties should not be compelled to transfer to this corps (C.M.H.Q. file 1/Cdn Army/1: Addendum to Minutes of Conference of Cdn Army Organizational Planning Committee, 24 Apr 42).

195. The Intelligence Corps within the Canadian Army was found largely within the staffs of formation headquarters. Separate units were mainly field security sections, which were allotted one to each division and corps, two to army troops, and two to G.H.Q. and L. of C. troops. A pool of eleven reserve detachments was held in G.H.Q. troops. The wireless intelligence sections have been referred to above (para 150). Five interrogation teams were provided, one in each corps and three in army troops. An Air Photograph Interpretation Section (A.P.I.S.) was included in army troops. Two censor sections were provided for the Canadian Forces in Italy (C.M.H.Q. file 1/Cdn Army/1/5: Canadian Army Overseas Routine Order No 4607, 15 May 44).

CONCLUSION

196. This account of the development of the Canadian Army has been carried in general to June 1944. No attempt has been made, however, to record the organization of 1 Cdn Corps and ancillary units in Italy. Points that should be noted in this connection are :

- (a) The different Middle East establishments in use in that theatre.
- (b) The new support battalion organization introduced for the task L.I. in the spring of 1944, in which a mortar group, a 20-mm group, and a machine-gun group were created.
- (c) The greater proportion of mortars in the machine gun battalion when that was adopted.

- (d) The introduction of an extra infantry brigade into 5 Cdn Armd Div.
- (e) The reorganization on standard establishments when 1 Cdn Corps joined First Cdn Army in 1945.

A word might be added about the most important of these, the creation of 12 Cdn Inf Bde. This was approved in principle by the Chief of Staff, C.M.H.Q., while on a visit to Italy in July 1944, but with the proviso that no additional reinforcements could be sent to that theatre, a condition accepted by the British commanders (C.M.H.Q. file 1/Cdn Army/1/5: Tel ACA 3370, FILPOT (from CANDEX) to CANMILITRY, 14 Jul 44). Approval in principle was granted by H.D.H.Q. in August 1944 (Ibid: Tel GSD 838, DEFENSOR to CANMILITRY, 3 Aug 44). The full manpower implications were calculated at 42 officers and 1079 other ranks in addition to current establishments. These figures did not take into account the increased reinforcement rates, nor the impact of that increase on the infantry, the arm of the service that was least able to absorb it (Ibid: Memorandum, S.D. & T., C.M.H.Q. to D.C.G.S., 27 Jul 44). Many details of the prolonged discussion over the name of the L.A.A. Bn may be found on C.M.H.Q. file 6/R.M.R./1.

197. In North-West Europe there were some minor changes in organization during the course of operations. Among these should be noted :

- (a) The dropping of 20-mm troops from light anti-aircraft regiments.
- (b) The use of light anti-aircraft regiments on rocket projectors and organizational implications, if any.
- (c) Some adjustments in anti-tank regiments to take care of an altered distribution of weapons.
- (d) The formation of 1 Cdn Armd Personnel Carrier Sqn, later Regt.

198. No mention has been made in this report of the Canadian Forestry Corps, or of its group of ten companies that formed part of the field force. Likewise 1st Canadian Parachute Battalion and 1st Canadian Special Service Battalion have been passed over. The latter was included within the manpower ceiling in August 1944 and was theoretically reinforced from the Canadian pool in Italy (C.M.H.Q. file 1/Org Inf/1). These matters belong to the narrative of operations or to the account of the specific unit or corps that was in the main acting independently of the main body of the Canadian Army.

199. The question of an air component for First Cdn Army is discussed in the Preliminary Narrative, History of the Canadian Military Forces Overseas, Chap XIV, paras 163-204. Control remained in the hands of the R.A.F., and it does not, therefore, properly form part of the organization of First Cdn Army. At only one stage in the planning were air co-operation squadrons included in the proposed composition; that was the all-inclusive "Third Proposal" of August 1942. Air Observation Posts of course fall into another category; the eventual appearance of the Canadian squadrons will be included among later developments.

200. This report does not pretend to have mentioned every unit within the Canadian Army, or every change in establishment during the years covered. It has concentrated on the main points of policy and the major

problems involved in planning the composition of the Army. By sketching very briefly the organization and major changes in the different arms, an attempt has been made to throw some light on the manifold complications that beset those who had to bring the composition of the whole into a reasonably definite state.

201. This report was drafted by Capt. J.E.A. Crake, General List, during the summer and autumn of 1945, prior to his return to the Historical Section (G.S.), Department of National Defence, Ottawa. Certain minor corrections and additions were made by Capt. J.H. Hitsman, General List, as a result of further information which has since come to light. Finally, the report in its present form was read, and considered to be a satisfactory account, by Lt-Col C.A. Hamilton, B.D. & T., C.M.M.C., who was responsible for carrying out many of the organizational changes and handling the details of policies described above.

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Director Historical Section

APPENDIX "A"

PROPOSED COMPOSITION - CANADIAN ARMY

The following table shows the composition proposed for the Canadian component of the Field Force, (a) when the formation of First Cdn Army was first proposed, (b) when the "Third Proposal" representing the ideal composition was drawn up in the summer of 1942, (c) when the manpower situation at the end of 1942 compelled economies, (d) when the target-date for completion of the programme had been reached. The figures show the total number of units proposed.

	<u>Jan 42</u>	<u>Aug 42</u>	<u>Jan 43</u>	<u>Oct 43</u>
<u>INFANTRY DIVISIONS</u>				
HEADQUARTERS UNITS:				
H.Q. Div	3	3	3	3
Div H.Q. Def & Emp Pl	3	-	-	3
H.Q. Div Sp Bn	-	3	3	3
Div Sp Coy	-	3	3	-
Div Int Sec	3	3	3	-
P.S. Sec	3	3	3	3
ARMoured CORPS:				
Reece Regt	3	3	3	3
ARTILLERY:				
H.Q. Div Arty	3	3	3	3
Fd Regt	9	9	9	9
A Tk Regt	3	3	3	3
Lt. A.A. Regt	3	-	3	3
ENGINEERS:				
H.Q. Div Engrs	3	3	3	3
Fd Pk Coy	3	3	3	3
Fd Coy	9	9	9	9
Div Br Pl	-	-	-	3
SIGNALS:				
Div Sigs	3	3	3	3
A Tk Regt Sig Sec	-	3	-	-
INFANTRY				
H.Q. Inf Bde	9	9	9	9
Inf Bn	27	27	27	27
Bde H.Q. Def Pl	9	-	-	9
Bde Sp Coy	-	9	9	-
Bde Sp Cp	-	-	-	9
M.G. Bn.	1	-	-	-
SUPPLY AND TRANSPORT:				
Comd Div R.C.A.S.C.	3	3	3	3
Div Amn Coy	3	-	-	-
Div Pet Coy	3	-	-	-
Div Sup Coy	3	-	-	-
Inf Bde Coy	-	9	9	9
Div Tps Coy	-	3	3	3
MEDICAL:				
Fd Amb	9	12	9	9
Fd Dressing Station	-	6	6	6
Fd Hyg Sec	3	3	3	3
Mob Bath	-	3	-	-
ORDNANCE:				
L.A.D. Type A	12	12	12	15
L.A.D. Type B	21	18	18	15
Lt A.A. Ord Wksp Sub Secs	12	-	-	-
Lt A.A. Regt Wksp	-	-	3	3
Div Ord Wksp	3	-	-	-
Div Ord Fd Pk	3	-	-	-
Ord Coy	-	9	-	-
Salvage Coy	-	3	-	-
H.Q. Inf Div R.E.M.E.	-	-	3	3
Inf Bde Wksp	-	-	9	9

	Jan 42	Aug 42	Jan 43	Oct 43
PROVOST:				
Div Pro Coy	3	3	3	3
POSTAL:				
Div Postal Unit	3	3	3	3
PAY:				
Fd Cash Office	-	3	-	-
<u>ARMoured DIVISIONS</u>				
HEADQUARTERS UNITS:				
H.Q. Arm'd Div	2	2	2	2
Arm'd Div Emp Pl	2	-	-	2
H.Q. Sqn	-	2	-	-
Arm'd Div Sp Coy	-	-	2	-
Arm'd Div Int Sec	2	2	2	-
F.S. Sec	2	2	2	2
ARMoured CORPS:				
Arm'd C. Regt	2	2	-	-
Arm'd Recce Regt	-	-	2	2
H.Q. Arm'd Bde	4	4	2	2
Arm'd Regt	12	12	6	6
ARTILLERY:				
H.Q. Sp Gp	2	2	-	-
H.Q. Div Arty	-	-	2	2
Fd Regt	2	4	2	2
A Tk Regt	2	2	2	2
Lt. A.A. Regt	2	-	2	2
Fd Regt S.F.	-	-	2	2
ENGINEERS:				
Fd Fk Sqn	2	2	2	2
Fd Sqn	4	4	4	4
Div Br Tp	-	-	-	2
SIGNALS:				
Arm'd Div Sigs	2	2	2	2
Fd Regt Sig Tp	-	2	-	-
Spec W/T Sec Type F	-	2	-	-
INFANTRY:				
H.Q. Inf Bde	-	-	2	2
Inf Bde Sp Coy	-	-	2	-
Inf Bde Def Pl	-	-	-	2
Inf Bde Sp Gp	-	-	-	2
Inf Bn	2	4	2	6
Motor Bn	4	4	2	2
Sp Gp Sp Coy	-	2	-	-
SUPPLY AND TRANSPORT:				
Comd Arm'd Div R.C.A.S.C.	2	2	2	2
Arm'd Bde Coy	4	4	2	2
Sp Gp Coy	2	2	-	-
Arm'd Div Tps Coy	2	2	2	2
Inf Bde Coy	-	-	2	2
MEDICAL:				
Lt Fd Amb	6	-	2	2
Fd Amb	-	6	2	2
Fd Dressing Station	-	4	2	2
Fd Hyg Sec	-	2	2	2
Lt Fd Hyg Sec	2	-	-	-
Mob Bath	-	2	-	-
ORDNANCE:				
L.A.D. Type A	2	2	4	4
L.A.D. Type B	12	14	8	10
L.A.D. Type C	12	12	8	8
L.A.D. Type D	-	-	2	2
Lt. A.A. Ord Wksp Sub Secs	6	-	-	-

	<u>Jan 42</u>	<u>Aug 42</u>	<u>Jan 43</u>	<u>Oct 43</u>
ORDNANCE (Contd).				
Lt. A.A. Regt Wksp	-	-	2	2
Armd Bde Ord Coy	4	-	-	-
Sp Gp Ord Coy	2	-	-	-
Ord Coy	-	2	-	-
Armd Ord Coy	-	4	-	-
Salvage Unit	-	2	-	-
H.Q. Armd Div R.E.M.E.	-	-	2	2
Armd Bde Wksp	-	-	2	2
Inf Bde Wksp	-	-	2	2
PROVOST:				
Pro Coy	2	2	2	2
POSTAL:				
Div Postal Unit	2	2	2	2
PAY:				
Fd Cash Office	-	2	-	-
<u>ARMY TANK BRIGADES</u>				
HEADQUARTERS UNITS:				
H.Q. Army Tk Bde	2	2	3	-
H.Q. Armd Bde	-	-	-	2
Army Tk Bde H.Q. Sqn	-	2	-	-
Army Tk Bde Hy Sp Sqn	-	-	3	-
ARMOURD CORPS:				
Army Tk Regt	6	6	9	-
Armd Regt	-	-	-	6
SIGNALS:				
Army Tk Bde Sigs	2	2	3	-
Armd Bde Sigs	-	-	-	2
SUPPLY AND TRANSPORT:				
Army Tk Bde Coy R.C.A.S.C.	2	2	3	-
Armd Bde Coy	-	-	-	2
MEDICAL:				
Lt Fd Amb	2	-	3	-
Fd Amb	-	2	-	-
ORDNANCE:				
L.A.D. Type C	6	6	9	6
Tk Bde Ord Coy	2	-	3	-
Armd Ord Coy	-	2	-	-
Armd Bde Wksp	-	-	-	2
Tk Tps Wksp	-	-	-	2
Tk Bde Sub Fk	-	-	-	2
<u>CORPS TROOPS</u>				
HEADQUARTERS UNITS:				
H.Q. Corps	1	2	2	2
H.Q. Armd Corps	1	-	-	-
Corps Def Coy	1	-	2	2
Armd Corps H.Q. Def Sqn	1	-	-	-
Corps Sp Coy	-	2	-	-
A.L. Sec	-	4	4	4
Air S.C.	-	-	2	-
F.S. Sec	2	2	2	2
Spec Wireless Int Sec Type B	-	-	2	-
Corps Int Sec	2	2	2	-
Corps Met Sec	2	2	-	-
ARMOURD CORPS:				
Armd C. Regt	-	-	2	2
Recco Regt	-	2	-	-

	<u>Jan 42</u>	<u>Aug 42</u>	<u>Jan 43</u>	<u>Oct 43</u>
ARTILLERY:				
H.Q. Corps Arty	1	2	-	-
Army Fd Regt	2	-	-	-
Med Regt	2	-	-	-
C.B.C. Staff	1	2	-	2
A Tk Regt	1	2	2	2
Lt. A.A. Regt	2	4	2	2
Svy Regt	1	-	2	2
Air C.P. Sqn	-	2	-	-
ENGINEERS:				
H.Q. Corps Tps Engrs	1	2	2	2
H.Q. Armd Corps Tps Engrs	1	-	-	-
Corps Fd Pk Coy	2	2	2	2
Army Fd Coy	3	6	-	-
Fd Coy	-	-	6	6
Bn R.C.E.	4	-	-	-
Corps Fd Svy Coy	1	-	-	-
Armd Corps Fd Svy Sqn	1	-	-	-
E. & M. Sec (A)	-	-	-	2
SIGNALS:				
H.Q. Corps Sigs	-	2	2	2
Armd Corps Sigs	1	-	-	-
Corps Sigs	1	-	-	-
Tech Maint Sec	-	2	2	2
Line Sec	-	6	6	6
Line Maint Sec	-	2	2	2
Op Sec	-	6	6	6
Corps Adv Wireless Sec	-	-	2	2
Corps Rear Wireless Sec	-	-	2	2
Spec Wireless Sec Type B	2	2	2	-
Spec Wireless Sec Type D	-	2	-	-
Med Wireless Sec	-	6	-	-
D.R. Sec	-	4	4	4
H.Q. Sec (Carrier Pigeon)	-	-	2	-
Pigeon Det	-	-	16	-
Pigeon Loft	4	14	-	-
H.Q. Corps Arty Sig Sec	-	2	2	2
A.Tk Regt Sig Sec	1	2	2	2
Lt. A.A. Regt Sig Sec	1	4	2	2
Lt. A.A. Regt Sig Tp	1	-	-	-
Med Regt Sig Sec	2	-	-	-
Fd Regt Sig Sec	2	-	-	-
H.Q. Corps R.C.E. Sig Sec	-	-	2	2
Armd C. Regt Sig Tp	-	-	-	2
Sig Pk	-	2	2	2
Cipher Sec	-	-	2	2
SUPPLY AND TRANSPORT:				
Comd Corps Tps R.C.A.S.C.	1	2	2	2
Corps Tps Amn Coy	1	-	-	-
Corps Tps Pet Coy	1	-	-	-
Corps Tps Sup Coy	1	-	-	-
Corps Tps Coy	-	4	4	4
Armd Corps Tps Coy	1	-	-	-
H.Q. Comd Corps Tpt Coln	1	-	2	2
Comd Armd Corps Tpt Coln	1	-	-	-
Gen Tpt Coy (4 Pl)	1	2	7	-
Gen Tpt Coy (3 Pl)	6	-	-	-
Inf Div Tpt Coy	-	-	-	3
Armd Div Tpt Coy	-	-	-	2
Corps Tpt Coy	-	-	-	2
Lt. A.A. Regt Fl	2	4	2	2
A Tk Regt Fl	-	-	-	2

	<u>Jan 42</u>	<u>Aug 42</u>	<u>Jan 43</u>	<u>Oct 43</u>
SUPPLY AND TRANSPORT (Contd.)				
Corps Bridge Coy	2	2	2	-
Comd Armd Corps Tptry Coln	1	-	-	-
Tk Tptry Coy	6	-	-	-
N.A.C.	-	2	2	2
MEDICAL:				
Fd Amb	1	2	-	-
Lt Fd Amb	1	-	-	-
Fd Surgical Unit	-	7	-	-
Fd Transfusion Unit	-	4	-	-
F.D.S.	-	2	2	2
Fd Hyg Sec	1	2	2	2
Lt Fd Hyg Sec	1	-	-	-
C.C.S.	-	4	4	4
M.A.C.	3	-	-	-
Adv Depot Med Stores	-	2	-	-
Mob Bath Unit	-	2	-	-
ORDNANCE:				
L.A.D. Type A	4	4	8	8
L.A.D. Type B	8	4	2	2
L.A.D. Type D	-	16	-	-
Lt. A.A. Wksp Sub Sec	6	-	-	-
Lt. A.A. Regt Wksp	-	-	2	2
H.Q. Corps Tps R.E.M.E.	-	-	2	2
Non Div Ord Wksp	1	-	-	-
Corps Tps Wksp	-	-	2	2
Div Sec Armd Corps Ord Wksp	2	-	-	-
Ord Coy	-	4	-	-
Army Tk Ord Wksp	2	-	-	-
Inf Tps Wksp	-	-	3	3
Armd Tps Wksp	-	-	2	2
H.Q. Corps Ord Fd Pk	-	-	2	2
Corps & Army Tps Sub Pk	-	-	2	2
Non Div Ord Fd Pk	1	-	-	-
Armd Corps Ord Fd Pk	1	-	-	-
Army Tk Ord Fd Pk	2	-	-	-
Inf Div Sub Pk	-	-	3	3
Armd Div Sub Pk	-	-	2	2
Salvage Unit	7	2	7	-
Mob Laundry & Fwd Decon Unit	7	-	-	-
Mob Bath Unit	7	-	-	-
Mob Laundry & Bath Unit	-	-	7	7
Mob Laundry	-	7	-	-
PAY:				
Fd Cash Office	7	2	7	7
POSTAL:				
Postal Unit	2	2	2	2
PROVOST:				
Provost Coy	2	2	2	2
MISCELLANEOUS:				
Reception Camp	2	-	-	-
Rft Camp	-	-	2	2
ATTACHED:				
A.C. Sqn R.C.A.F.	-	4	-	-
ARMY TROOPS				
HEADQUARTERS UNITS:				
Army H.Q.	-	1	1	1
Army H.Q. Sp Coy	-	1	-	-
Army H.Q. Def Coy	-	-	1	1
Army Int Sec	-	1	1	1
F.S. Sec	-	1	2	2
Wireless Int Sec Type A	-	-	1	-

	<u>Jan 42</u>	<u>Aug 42</u>	<u>Jan 43</u>	<u>Oct 43</u>
HEADQUARTERS UNITS: (Contd)				
Army Air Op Control	1	2	-	-
Air Liaison Sec	4	2	3	3
Army Staff H.Q. Wing R.C.A.F.	-	1	1	1
Radio Location Unit	1	1	-	-
C.W. Def Lab	1	1	1	1
ARMoured CORPS:				
Recco Regt	1	1	2	-
Tk Delivery Regt	-	-	1	1
ARTILLERY				
H.Q. Army Tps R.C.A.	-	1	-	-
A.G.R.A.	-	-	2	2
H.Q. Corps Med Arty	1	-	-	-
Army Fd Regt	1	5	4	2
Med Regt	3	5	5	6
Calibration Troop	1	1	1	1
Survey Regt	-	1	-	-
C.B.O. Staff	-	-	2	-
G.O.R. (Mobile)	-	-	1	-
A.A. Op Room	-	-	-	1
Met Unit	-	-	-	1
H.Q. A.A. Bde	1	2	1	1
Hy A.A. Regt	1	2	1	1
Lt. A.A. Regt	1	4	2	2
Air O.P. Sqn	-	1	-	-
ENGINEERS:				
H.Q. Army Tps R.C.E.	-	2	1	1
Bn R.C.E.	-	5	1	-
Fd Coy	-	-	-	3
Fd Pk Coy	-	-	-	1
Wksp & Pk Coy	-	1	1	1
Mech Equip Coy	1	1	1	-
E. & M. Sec A	-	-	-	1
Rd Const Coy	2	2	-	-
Tunnelling Coy	1	1	-	-
Spec Tunnelling Coy	1	1	-	-
H.Q. Survey Coy	-	-	-	3
Topo Sec	-	-	-	6
Drawing Sec	-	-	-	2
Repro Sec	-	-	-	4
Map Photo Sec	-	-	2	2
Air (Svy) Liaison Sec	-	-	1	1
Gen Svy Sec	-	-	1	3
Fd Svy Depot	-	1	1	1
Fd Svy Coy	-	1	2	-
H.Q. C.W. Op	1	1	-	-
C.W. Coy	4	2	-	-
C.W. Pk	-	1	-	-
SIGNALS:				
H.Q. Army Sigs	-	1	1	1
Adm Sec	1	-	-	-
Operating Sec	1	-	-	-
Tech Maint Sec	-	1	1	1
Line Sec	-	4	3	3
Tele Op Sec	-	4	4	4
Line Maint Sec	1	1	1	1
Construction Sec	-	1	2	2
D.R. Sec	1	3	3	3
H.Q. M.A. Sig Sec	1	-	-	-
Army Arty Sig Sec	-	2	-	-
Arty Group Sig Sec	-	-	2	2
Fd Regt Sig Sec	1	5	4	2

Jan 42. Aug 42. Jan 43. Oct 43.

SIGNALS (Contd).

Med Regt Sig Sec	3	5	5	6
Mobile G.O.R. Sig Sec	-	-	1	-
A.A. Ops Room Sig Sec	-	-	-	1
A.A. Bde H.Q. Sigs	1	2	1	1
Hy A.A. Regt Sig Sec	1	2	1	1
Lt. A.A. Regt Sig Sec	1	4	2	2
Recce Bn Sig Sec	1	-	2	-
H.Q. Tk Del Regt Sig Sec	-	-	-	1
Tk Del Sgns Sig Det	-	-	-	4
Wireless Sec	-	-	-	5
Hy Wireless Sec	1	2	-	-
Med Wireless Sec	-	3	5	-
Spec Wireless Sec Type A	-	1	1	-
Spec Wireless Sec Type C	1	-	-	-
Spec Wireless Sec Type D	1	-	-	-
Spec Wireless Sec Type E	3	-	-	-
H.Q. Sec (Pigeon Loft)	-	1	1	-
Pigeon Loft	-	2	6	-
Air Cp Control Sigs	1	2	1	-
A.S.S.U.	-	-	-	1
Wing Sig Secs	2	1	1	1
Cipher Sec	-	-	2	2
Sig Pk	1	1	1	1

INFANTRY:

M.G. Bn	1	-	-	-
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SUPPLY AND TRANSPORT:

H.Q. R.C.A.S.C. Army Tps	-	-	2	1
H.Q. Arty Coy	1	2	2	3
Fd Regt Pl	1	5	4	2
Med Regt Pl	3	5	5	6
H.Q. A.A. Bde Coy	1	1	1	-
Hy A.A. Regt Pl	1	2	1	1
Lt. A.A. Regt Pl	1	4	2	2
Comd Corps Tp Carrying Coln	1	1	-	-
H.Q. Comd Arty Tpt Coln	-	1	-	-
H.Q. Comd Army Tpt Coln	-	3	-	1
Army Tps Coy	1	-	1	-
Gen Tpt Coy	4	14	-	4
Tp Carrying Coy	-	4	3	-
Army Tps Composite Coy	-	-	-	2
H.Q. Comd Tk Tpnr Coln	-	1	-	-
Tk Tpnr Coy	-	6	3	1
M.A.C.	-	1	-	-
Bridge Coy	-	-	-	2
Mob Pet Lab	-	-	1	1

MEDICAL:

Fd Amb	1	1	-	-
Fd Dressing Station	-	1	5	5
Fd Surgical Unit	-	1	-	-
Fd Transfusion Unit	5	1	7	7
Fd Hyg Sec	-	1	1	1
Mob Hyg Lab	1	1	-	-
Mob Bact Lab	1	1	-	-
Mob Bath	-	1	-	-
Mob Neuro Unit	-	1	-	-
Neuro Hosp (Mobile)	-	1	-	-
C.C.S.	5	1	1	1
Adv Depot Med Stores	1	-	-	-

DENTAL:

Dental Coy	-	8	-	8
Adv Depot Dental Stores	-	1	-	1

	Jan 42	Aug 42	Jan 43	Oct 43.
ORDNANCE:				
L.A.D. Type A	-	3	3	1
L.A.D. Type B	7	16	11	9
L.A.D. Type C	-	-	1	-
L.A.D. Type D	-	16	-	-
Hy A.A. Regt Wksp Sec	1	2	-	-
Hy A.A. Wksp (B)	-	-	1	1
Lt A.A. Wksp Sub Sec	3	-	-	-
Lt A.A. Wksp (B)	-	-	2	2
H.Q. Comd R.E.M.E.	-	-	1	1
Non Div Ord Wksp	1	-	-	-
Army Ord Wksp	2	-	-	-
Inf Ord Wksp	-	3	-	-
Armd Ord Wksp	-	2	-	-
Tk Ord Wksp	-	2	-	-
Army Tps Wksp	-	-	1	1
Ord Coy	-	4	-	-
Engr Bqpt Wksp (A)	-	-	-	1
H.Q. Ord Pks	-	2	-	-
Non Div Ord Fd Pk	1	-	-	-
Army Ord Fd Pk	2	-	-	-
Inf Ord Pk	-	3	-	-
Armd Ord Pk	-	2	-	-
Tk Ord Pk	-	2	-	-
Army Tps Sub Pk	-	-	-	1
Salvage Unit	-	1	1	4
Recovery Coy	-	-	2	2
Ord R.H. Coy	-	-	1	1
Mob Laundry	-	1	-	-
Mob Laundry & Bath Unit	-	-	1	1
PAY:				
Fd Cash Office	1	1	1	1
PROVOST:				
Provost Coy	1	1	1	1
H.Q. T.C. Gp	-	1	-	-
H.Q. T.C. Coy	-	4	-	-
T.C. Sec	-	32	-	-
POSTAL:				
Postal Unit	1	1	1	1
MISCELLANEOUS:				
Graves Registration Unit	1	1	-	-
Cdn Auxiliary Services	1	-	-	-
Labour Gp	-	-	-	1
Rft Camp	-	8	-	1

G.H.Q. AND L. OF C. UNITS

HEADQUARTERS UNITS:

Cdn Sec G.H.Q. 1 Ech	-	1	1	1
Cdn Sec G.H.Q. 2 Ech	1	1	1	1
Cdn Iner H.Qs. L. of C.	-	1	-	-
H.Q. Base Sub Area	-	-	1	-
M.C. Gps	-	3	1	-
Public Relations Service	-	-	1	-
Hirings Directorate	-	-	1	-
Claims Commission	-	-	1	-
Town Major 1st Class	-	-	3	1
Town Major 2nd Class	-	-	10	5
Town Major 3rd Class	-	-	10	5

ENGINEERS:

C.E. Works	-	1	1	1
C.R.E. Works	-	-	1	1
Mech Bqpt Coy	-	1	-	-
Mech Bqpt Wksp & Pk Coy	-	-	1	-

Jan 42. Aug 42. Jan 43. Oct 43.

ENGINEERS (Contd)

H.Q. Mech Eqp Coy	-	-	-	1
Mech Eqp Sec B	-	-	-	4
Mech Eqp Pk Coy	-	-	-	1
Wksp & Pk Coy	1	-	-	-
Works Sec	-	-	-	5
Rd Const Coy	-	2	2	2
Tunnelling Coy	-	-	2	2
Boring Sec	-	2	-	-
Bomb Disposal Coy	-	3	-	-
Bomb Disposal Sec	-	30	-	-
Bn R.C.E.	-	-	3	3
Stores Sec	-	-	-	1
H.Q. Ry Op Coy	-	-	1	1
Ry Op Coy	-	-	2	2
Ry Wksp Coy	-	-	1	1

SIGNALS:

H.Q. L. of C. Sigs	-	1	-	1
H.Q. 1, 2, 3 Coys	-	1	-	1
Line Sec	-	6	-	-
Tech Maint Sec	-	2	-	2
Line Maint Sec	-	2	-	2
Tele Op Sec	-	6	-	6
Tele Cmbd Op Sec	-	2	-	2
Carrier Tele Sec Type A	-	10	-	-
D.R. Sec	-	3	-	3
D.R. Sec (Lt Car)	-	2	-	2
Constr Sec	-	-	-	6
Wireless Sec	-	4	-	4
Spec Wireless Sec Type A	-	-	-	1
Spec Wireless Sec Type B	-	-	-	2
H.Q. Ry Tele Coy	-	-	1	1
Ry Line Maint Sec	-	-	1	1
Ry Tele Op Sec	-	-	1	1
Cipher Sec	-	1	-	3

SUPPLY AND TRANSPORT

Bulk Pet Coy	1	1	-	-
Pet Depot	-	1	-	-
Pet Depot Type A	-	3	-	-
Pet Depot Types B & C	-	8	-	-
Mob Pet Filling Centre	-	9	-	-
M.T.V.R.D.	1	-	-	-
Hy Repair Sec	1	-	-	-
Base Provision Offr	-	2	-	-
Detail Issue Depot	-	10	-	-
Base Supply Depot	-	5	-	-
Pd Bakery Type A	-	1	-	-
Pd Bakery Mobile	-	7	-	-
Pd Butchery Type B	-	5	-	-
Mob Printing Sec	1	1	1	1
Adv Stationary Depot	-	1	1	1
H.Q. Comd L. of C. Tpt Coln	-	5	-	-
Gen Tpt Coy	-	11	-	-
H.Q. Comd Amb Car Coln	-	1	-	-
Amb Car Coy	-	5	-	-

MEDICAL:

Pd Surgical Unit	-	-	11	11
Base Transfusion Unit	-	1	-	1
Pd Hyg Sec	-	2	1	1
Mob Hyg Lab	-	-	1	1
Mob Bact Lab	-	-	2	2
Mob Neurosurgical Unit	-	1	1	1
Neurological Hosp	1	-	-	-

	<u>Jan 42</u>	<u>Aug 42</u>	<u>Jan 43</u>	<u>Oct 43</u>
MEDICAL (Contd)				
Gen Hosp (200 bed)	-	-	2	2
Gen Hosp (600 bed)	4	8	5	5
Gen Hosp (1200 bed)	4	5	7	7
Convalescent Depot	2	3	3	3
Adv Depot Med Stores	-	-	2	2
Base Depot Med Stores	-	2	2	2
DENTAL:				
Dental Coy	-	1	8	-
Adv Depot Dental Stores	-	1	-	-
Base Dental Stores	-	-	-	1
ORDNANCE:				
L.A.D. Type A	-	1	-	1
L.A.D. Type B	-	-	3	3
Ord Coy	-	1	-	-
Inf Ord Wksp	-	1	-	-
Adv Component B.O.W.	-	1	2	2
Base Ord Wksp	1	-	-	-
Engr Eqp Wksp (B)	-	-	-	1
Port Wksp Det	-	-	1	1
Ord Beach Det	-	4	-	-
Ord R.H. Coy	-	1	-	-
Inf Ord Fk	-	1	-	-
Adv Component B.O.D.	-	2	2	-
Base Ord Depot	1	-	-	-
Base Arm Depot	-	2	-	-
Salvage Unit	-	1	-	-
Mob Laundry	-	1	-	-
PAY:				
Pwr Cdn Tps in Pd	1	1	1	1
Pd Cash Office	-	-	1	1
POSTAL:				
A.F. Postal Unit	-	1	-	-
L. of C. Postal Unit	-	1	1	1
Base Post Office	-	1	1	1
PROVOST:				
L. of C. Provost Coy	-	1	1	1
Spec Investigation Sec	-	1	-	1
Pd Punishment Camp	2	1	1	1
Military Prison	-	1	-	-
Detention Barracks	1	-	-	-
FORESTRY:				
H.M. District C.F.C.	-	-	-	1
Forestry Coy	-	-	-	5
INTELLIGENCE:				
Censor Sec	4	8	-	-
Spec Censor Sec	2	-	-	-
Tele Censor Sec	-	1	-	-
P.W. Censor Sec	-	1	-	-
Press Censor Sec	-	1	-	-
L. of C. Int Sec	-	1	-	-
Wireless Int Sec (A)	-	-	-	1
Wireless Int Sec (B)	-	-	-	2
F.S. Sec	-	-	2	2
Reserve F.S. Sec	-	-	-	11
MISCELLANEOUS:				
Base Depot	1	-	5	5
Inf Base Depot	-	1	-	-
Gen Base Depot	-	1	-	-
R.A.C. Base Depot	-	1	-	-
Rft Camp	-	-	1	-
Transit Camp	-	1	-	-
P.W. Camp (Offr)	-	3	-	-
P.W. Camp (O.R.)	-	3	-	-
H.M. Pioneer Gp	-	-	1	1

	<u>Jan 42</u>	<u>Aug 42</u>	<u>Jan 43</u>	<u>Oct 43</u>
MISCELLANEOUS (Contd)				
Gen Labour Sec	-	70	-	-
Graves Registration Unit	-	-	1	1
Film & Photo Unit	-	1	-	-

APPENDIX "B"

ARMOURD CORPS UNITS BEFORE AND AFTER REORGANIZATION

<u>Old Organization</u>	<u>New Organization</u>	<u>Date of Change</u>
H.Q. 4 Cdn Arm'd Div	H.Q. 4 Cdn Arm'd Div	31 Jan 43
H.Q. Sqn 4 Cdn Arm'd Div		
H.Q. 3 Cdn Arm'd Bde	H.Q. 3 Cdn Army Tk Bde	31 Jan 43
H.Q. Sqn 3 Cdn Arm'd Bde	Disbanded	1 Nov 43
25 Cdn Arm'd Regt (Elgin R.)	25 Cdn Tk Del Regt	15 Sep 43
28 Cdn Arm'd Regt (B.C.R.)	to 4 Cdn Arm'd Bde	31 Jan 43
29 Cdn Arm'd Regt (S. Alta R.)	29 Cdn Arm'd Recce Regt	1 Feb 43
H.Q. 4 Cdn Arm'd Bde	H.Q. 4 Cdn Arm'd Bde	31 Jan 43
H.Q. Sqn 4 Cdn Arm'd Bde		
21 Cdn Arm'd Regt (G.G.F.G.)	to 4 Cdn Arm'd Bde	31 Jan 43
22 Cdn Arm'd Regt (C.G.G.)	to 4 Cdn Arm'd Bde	31 Jan 43
27 Cdn Arm'd Regt (Sher Pua R.)	27 Cdn Army Tk Regt	31 Jan 43
H.Q. 5 Cdn Arm'd Div	H.Q. 5 Cdn Arm'd Div	31 Jan 43
H.Q. Sqn 5 Cdn Arm'd Div (6 H.)		
H.Q. 1 Cdn Arm'd Bde		
H.Q. Sqn 1 Cdn Arm'd Bde (P.E.I.L.H.)	H.Q. 11 Cdn Inf Bde	31 Jan 43
2 Cdn Arm'd Regt (Ld S.H.)	to 5 Cdn Arm'd Bde	31 Jan 43
6 Cdn Arm'd Regt (L.H.)	6 Cdn Army Tk Regt	31 Jan 43
10 Cdn Arm'd Regt (Fort Garry's)	10 Cdn Army Tk Regt	31 Jan 43
H.Q. 2 Cdn Arm'd Bde	H.Q. 5 Cdn Arm'd Bde	31 Jan 43
H.Q. Sqn 2 Cdn Arm'd Bde (7/11 H.)		
3 Cdn Arm'd Regt (G.G.H.G.)	3 Cdn Arm'd Recce Regt	1 Feb 43
5 Cdn Arm'd Regt (S.N.B.H.)	to 5 Cdn Arm'd Bde	31 Jan 43
9 Cdn Arm'd Regt (B.C.D.)	to 5 Cdn Arm'd Bde	31 Jan 43
H.Q. 1 Cdn Army Tk Bde	H.Q. 1 Cdn Army Tk Bde	31 Jan 43
H.Q. Sqn 1 Cdn Army Tk Bde (N.B.R. (T.))		
11 Cdn Army Tk Regt (Ont R(T))	Unchanged	
12 Cdn Army Tk Regt (Three Riv R. (T.))	Unchanged	
14 Cdn Army Tk Regt (Calg R. (T.))	Unchanged	
H.Q. 2 Cdn Army Tk Bde	H.Q. 2 Cdn Army Tk Bde	(In Canada)
H.Q. Sqn 2 Cdn Army Tk Bde		
20 Cdn Army Tk Regt (16/22 Horse)	Disbanded	1 Nov 43
23 Cdn Army Tk Regt (Hal Rif)	Disbanded	1 Nov 43
26 Cdn Army Tk Regt (Grey & Sim Fors)	Disbanded	1 Nov 43

(C.M.H.Q. file 1/Org C.A.C./1: Reorganization of Units
Canadian Armoured Corps in U.K. 1943, 12 Sep 43).

APPENDIX "C"

R.C.A.S.C. ORGANIZATION

The following table shows the composition of each type of supply and transport company in the establishments in force in 21 Army Group in the early part of 1944 (C.M.H.Q. file 1/Reorg R.C.A.S.C./1/2: Letter, Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 28 Mar 44). These establishments were adopted by the Canadian Forces in Italy in July 1944 (Ibid: Letter, Chief of Staff, C.M.H.Q. to G.O.C.-in-C., First Cdn Army, 21 Jul 44).

	H.Q. Comd R.C.A.S.C.	H.Q. M.T. Coy	Tpt Pl	Arm Pl	Comp Pl	R.D.I.	Wksp Pl
H.Q. Inf Div							
R.C.A.S.C.	1	-	-	-	-	-	-
H.Q. Arm Div							
R.C.A.S.C.	1	-	-	-	-	-	-
H.Q. C. Tps							
R.C.A.S.C.	1	-	-	-	-	-	-
H.Q. A. Tps							
R.C.A.S.C.	1	-	-	-	-	-	-
H.Q. Army Tpt Coln	1	-	-	-	-	-	-
H.Q. Gen Tpt Coln	1	-	-	-	-	-	-
H.Q. Corps Tpt Coln	1	-	-	-	-	-	-
Inf Bde Coy	-	1	2	-	1	2	1
Inf Bde Coy (Arm Div)	-	1	3	-	1	2	1
Arm Bde Coy	-	1	5	-	1	3	1
Indep Arm Bde Coy	-	1	4	-	1	2	1
Inf Div Tps Coy	-	1	2	-	A & B Secs	2	1
Arm Div Tps Coy	-	1	4	1	A & B Secs	2	1
C. Tps Comp Coy	-	1	3	-	1	2	1
A. Tps Comp Coy	-	1	3	-	1	2	1
H.Q. Arty Coy	-	1	-	-	-	-	1
Arty Pl	-	-	1	-	A Sec	1	-
Arm Div Tpt Coy	-	1	3	1	-	2	1
Corps Tpt Coy	-	1	3	1	-	1	1
Army Tpt Coy	-	1	4	1	-	2	1
Army Tpt Coy	-	1	3	1	-	1	1
Gen Tpt Coy	-	1	4	-	-	2	1
Tk Tptr Coy	-	1	3	1	-	3	1
Corps Car Coy	-	1	2	-	-	-	1
M.A.C.	-	1	3	-	-	2	1

There were five types of workshop platoon in use. These have not been distinguished in the above table.

APPENDIX "D"

UNITS DISBANDED

The following units, which represented cavalry or infantry units of the Canadian Militia, arrived overseas but did not gain a place in the order of battle:

- (a) Units of 2 Cdn Army Tank Bde:
20th Army Tank Regiment (16th/22nd Saskatchewan Horse) C.A.C.
23rd Army Tank Regiment (The Halifax Rifles) C.A.C.
26th Army Tank Regiment (The Grey and Simcoe Foresters) C.A.C.
- (b) Headquarters Squadrons disbanded in January 1943:
Headquarters Squadron 5th Canadian Armoured Division (6th Duke of Connaught's Royal Canadian Hussars).
Headquarters Squadron 2nd Canadian Armoured Brigade (7th/11th Hussars)
Headquarters Squadron 1st Canadian Army Tank Brigade (The New Brunswick Regiment (Tank))
- (c) Reconnaissance Regiments surplus to requirements:
30 29th Reconnaissance Regiment (The Essex Regiment) C.A.C.
31st (Alberta) Reconnaissance Regiment C.A.C.
- (d) Infantry units of 13 Cdn Inf Bde:
The Canadian Fusiliers (City of London Regiment)
Le Regiment de Hull
The Rocky Mountain Rangers
The Winnipeg Grenadiers
Le Regiment de Montmagny (arrived separately)
- (e) Infantry units of 14 and 15 Cdn Inf Bdes:
Les Fusiliers de Sherbrooke
Fusiliers du St. Laurent
Irish Fusiliers (Vancouver Regiment)
The Midland Regiment (Northumberland and Durham)
The Oxford Rifles
The Prince Edward Island Highlanders
The Prince of Wales Rangers (Peterborough Regiment)
1st Airfield Defence Battalion (Le Regiment de Chateaugay)
Le Regiment de Joliette
The Royal Rifles of Canada
The Saint John Fusiliers
The Winnipeg Light Infantry.
- (f) Other infantry units in the order of their arrival:
Les Voltigeurs de Quebec
The Victoria Rifles of Canada
The Dufferin and Haldimand Rifles of Canada.

(C.M.A.C. file 1/Org C.A.C./1 and 1/Org Inf/1).