

ANNEXURE "R"

REPORT BY C.R.A. 1 AIRBORNE DIVISION

ON

OPERATION MARKET

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PART I.

A. OUTLINE PLAN OF 1 AIRBORNE DIVISION.

The Division was to land in two lifts.

1. First Lift.

This was to land on D Day September 17th at 1300 hrs.

(a) Composition.

Tac Div HQ

1 A/L Recce Sqn

1 A/L Lt Regt (less one bty)

1 Para Bde

1 A/L A Tk Bty RA

1 Para Sqn RE

16 Para Fd Amb

1 A/L Bde (less certain sub-units)

9 Fd Coy RE

181 A/L Fd Amb

(b) Tasks. (See Appx. "A").

1 Para Bde with under comd 1 A/L A Tk Bty RA

was to:- (i) Seize and hold ARNHEM in order of
priority

(a) Main rd bridge

(b) Pontoon bridge

(ii) On arrival of second lift, seize and
occupy the SE section of the proposed
Div perimeter.

1 A/L Bde was to

(i) Secure main LZs and DZ and cover unloading
of 1st lift.

(ii) Establish posts (strength approx one coy) at

(a) Rd EDE - ARNHEM near PLANKETT WAMBUIS

(b) Rd WAGENINGEN - ARNHEM near RENKUM.

(iii) Protect arrival of 2nd lift on main LZs & DZ.

(iv) After completion of 2nd lift unloading
and occupy the WEST section of the Div
perimeter.

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2. Second Lift.

This was due to land on D + 1 Sept 18th at 1130 hrs.

(a) Composition.

4 Para Bde
2 A/L A Tk Bty RA
One bty 1 A/L Lt Regt RA
Balance Div glider element
Balance 1 A/L Bde

(b) Tasks.

4 Para Bde with under comd 2 A/L A Tk Bty RA was to seize and occupy NE section of Div perimeter, axis of movement being rd EDE - ARNEEM.

R.A.PLAN.

1. Light Regt.

(a) First Lift.

(i) Employment.

The two btys (1 and 3 Lt Btys) in the first lift were to remain under comd CRA with one bty in sp of each 1 Para Bde and 1 A/L Bde.

(ii) Comd and Control.

BCs of 1 and 3 Lt Btys were to join their respective Bde comds on landing. Throughout the operation the intention was to keep the Lt Regt centralised under comd CRA so as to afford the maximum concentration of fire on any sector but as 1 Para Bde were to move immediately on landing to the town, it would be necessary after the initial advance, due to range, to move 3 Lt Bty and place it under comd 1 Para Bde until the Div less 1 Para Bde also moved into the ARNEEM area.

(iii) Gun Posns.

Initial gun area was in a central posn SOUTH of WOLFHEZEN, from which either Bde could be supported immediately after landing. 3 Lt Bty were ordered to be prepared to move EAST on the evening of D Day.

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(iv) Observation.

Owing to the closeness of the country and difficulty in observation it was necessary to employ a large number of FOOs from 1 F.O.U. for shooting the Lt Regt in addition to the Lt Regt OPs. 1 Para Bde had a total of six OPs (two per bn) and the A/L Bde had five. Seven out of the eleven were on foot, each with two Sigs and a 68R set. The remainder had 22 sets in Jeeps.

Each OP pffr had a list of pre-arranged tgts to cover all known enemy defences particularly 88mm gun posns which were known from air photographs.

(v) Comms. (See comms diagram as at Appx."B").

- (a) BCs at Bde HQ had one or more 22 sets on the Bty net. The FOOs with Bns with 68R were also on their respective Bty net. Distances were such that it was arranged that orders from OPs where necessary could be relayed to the gun posns by the 22 sets at Bde HQ.
- (b) In order that 1 Para Bde should have a maximum number of OPs capable of engaging the isolated 88mm guns simultaneously, 3 Lt Bty were given a frequency per tp just for the initial adv.

(b) Second Lift.

- (i) 2 Lt Bty on landing was to go into action alongside 1 Lt Bty under comd Lt Regt and in sp 4 Para Bde.
- (ii) On the evening of D + 1, 1 A/L Bde and 4 Para Bde were to move EAST to take up posns on the high ground WEST and NORTH of ARNHEM respectively. The Lt Regt, less 3 Lt Bty would then join 3 Lt Bty in the area ~~OOSTERBEEK~~ where the Regt under comd CRA would be able to cover the whole Div perimeter.

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2. 1 Forward Observation Unit.

It was not anticipated that 30 Corps arty would be in range before evening of D + 1, therefore 1 FOU were deployed initially for observation for the Lt Regt.

3. Anti-Tank.

(a) Allotment of A.Tk guns within the Div after arrival of 2nd lift was as follows:-

1 Para Bde - 1 A Tk Bty less one 17 pr tp(i.e.12 x 6 prs and
4 x 17 prs).
4 Para Bde - 2 A Tk Bty less one 17 pr tp(i.e.12 x 6 prs and
4 x 17 prs).
1 A/L Bde - 18 x 6 prs (all inf guns).
Div Tps Area - One tp 6 prs and two tps 17 prs - under comd Capt.
1 A Tk Bty.

(b) On landing tps were to come under comd of Bns initially, but would revert to BCs and likewise Btys under CRA immediately it became possible to co-ordinate A.Tk defence.

C. EMPLOYMENT OF ARTILLERY UP TO D + 8.

1. Landing State.

The Lt Regt left airfde with 24 guns and arrived with 23, one glider having had to land in HOLLAND en route.

1 A Tk Bty left with 12 x 6 prs and 8 x 17 prs. They arrived with 10 x 6 prs and 6 x 17 prs. One of the 6 prs landed 20 miles wide and subsequently joined up, the other landed in WALCHEREN ISLAND en route: the two 17 prs crashed on landing.

2 A Tk Bty left with 16 x 6 prs and 8 x 17 prs. They commenced battle with 16 x 6 prs and 5 x 17 prs. One 17 pr landed in the NORTH SEA and the other two in HOLLAND.

The two Hamilcars which crashed landed in a flat but rather soft potato fd and both turned over their nose on to their backs. In both cases casualties to personnel were small but equipment was a write-off.

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2. Sp by Lt Regt (D Day to D + 5).

(a) Only tgts engaged on D day were in sp 1 Para Bde until the evening when tgts were engaged at RENKUM in sp of the BORDER Coy there; and several calls for Def were made by this Coy during the night. This proved effective.

During the first twenty four hours the adv of 1 and 2 Para Bns was well supported but all communications with 3 Bn failed.

Before the arrival of the 2nd lift on D+1, several tgts were engaged in the K.O.S.B. area, and later all available fire was required to disengage the BORDER Coy at RENKUM.

On D + 2 and + 3 O.C. 3 Lt Bty who was in the houses facing the NORTH end of the main bridge engaged a large number of tgts on both banks of the river in the bridge area. This continued up to the night of D + 3 when resistance at the bridge ceased. A considerable amount of the Lt Regt amm was expended by calls from the bridge.

During the same period 4 Para Bde and 1 A/L Bde also had their share of the limited amount of amm.

On D + 2 the attack NORTH of the rly by 4 Para Bde with under cmd 7 K.O.S.B. was supported by observed fire.

In all cases the country was very close and practically no good observation possible.

On D + 3 onwards enemy pressure increased on the WEST side of the perimeter and in consequence the remainder of the Lt Regts amm was expended in observed fire either in sp of 1 BORDERS in the WEST or for its own protection.

(b) Amn.

137 rpg were carried into battle (125 HE, 6 AP, 6 Smk) and approx. 50 rpg were received in re-supply. None was received after D + 5 and by that stage the Lt Regt had left approx. 45 rpg.

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(c) Period D + 5 to end.

With the availability of sp from 30 Corps arty the remaining amn of the Lt Regt was largely kept for repelling assaults on own area - by then part of the Div perimeter - and occasionally for thickening up the most important and urgent tgts engaged by 30 Corps arty.

Most of the Lt Regts perscnel were by then filling their time with active inf fighting incl tk hunting and periodical ejection of snipers from the gun area.

3. Anti-Tank.

Owing to the extremely close country incl much street fighting and to the high rate of casualties, accurate or even approx. compilation of enemy tks destroyed or damaged is not possible. It is known, however, that the A.Tk guns did account for a considerable number of tanks, armoured cars, half tracks and S.P.guns which, except on the last day, never made a major penetration of the Div perimeter. The Div as a whole accounted for upwards of 25 tks and S.P.guns for certain. (PsIAT included).

1 A/L A.Tk Bty which supported 1 Para Bde went with its bns into ARNHEM. The tp under comd 2 Para Bn on the main bridge, did not re-appear, but the remainder of the Bty fought the battle either in the SE sector or the lower rd into ARNHEM or else in the main A.Tk reserve at Div HQ. The effect of the tp on the bridge is clearly seen by the number of derelict vehs of all types shown by air photographs taken on 18 Sep.

2 A/L A.Tk Bty under comd 4 Para Bde suffered by casualties both to guns and personnel during the very confused fighting in the woods on D + 2 and + 3.

The losses both in personnel and transport throughout the Bde were very considerable owing to the difficulty of crossing the rly and the thickness of the woods making it impossible for transport.

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3. Anti-Tank(Cont'd).

The original Div HQ reserve was to be one 17 pr tp from each Bty and a 6 pr tp from 2 A/L A.Tk Bty.

This in practice proved to be mainstay of the A.Tk defence and varied in strength as odd guns, with their detachments, were added to it, or parts of it were despatched on various missions throughout the battle. Its HQ was alongside HQRA and the necessity for a strong reserve at Div HQ was a proved without question.

Both Sabot and APCBC taken in proportion 65% to 35% both proved most satisfactory. Some difficulty was experienced in observing the SABOT and had such close fighting been envisaged, it is possible that a larger proportion of APCBC would have been taken.

A small proportion of 6 pr HE was received in re-supply.

4. Sp from 30 Corps Arty.

At about 0900 hrs on D + 4 wireless contact was first made with the arty of 30 Corps, namely 64 Med Regt. Two R.A. sets from 1 A/B Div were from then on kept permanently on the command net of this unit, and most of the calls for fire were sent by this means.

64 Med Regt had normally available their own two btys of 4.5 and 5.5 gun hows and a hy bty of 155mm. In addition they could, and did, call on a 4.5 bty of 7 Med Regt, Bty of 3.7 H.A.A. and two 25 pr Regts from 43 Div.

Communication between 1 A/B Div and the 4 FOU reps with 30 Corps Arty was never satisfactorily established, though from time to time it was through. Shoots only took place on this link on one day.

On the last day one of the OPs from 121 Fd Regt that crossed the R.LEK with the DORSETS joined the Lt Regt and thus provided a direct link with 43 Div Arty.

Due however to the first class communications between HQRA 1 A/B Div and 64 Med Regt it was possible to call for fire extremely quickly and the response by the 30 Corps Arty was excellent.

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4. Sp from 30 Corps Arty (Cont'd).

More than 40 MZ tgts were registered and during the five days at least 160 tgts were engaged - the great bulk of them being enemy attacks at all stages of development. The quick and accurate fire had considerable effect in beating up the attacks and the moral effect on our tps was tremendous.

Complete figures of amn expenditure are not available but it is known that an 8 gun 4.5 Bty of 64 Med Regt fired a total of 3000 rds and the 4 gun 155 mm Bty fired 650 rds, the last named being finally reduced to 4 rpg.

The Arty sp from 30 Corps undoubtedly proved to be a decisive factor and without which the course of the battle would have been completely altered.

A detailed account of 30 Corps Arty sp is in Appx."C".

5. Arty Sp for Withdrawal of 1 A/B Div.

(a) At 1300 hrs on 25 Sep details of cones and timings of the fire plan required to cover the withdrawal of 1 A/B Div was sent by CRA 1 A/B Div via 64 Med Regt to CCRA 30 Corps.

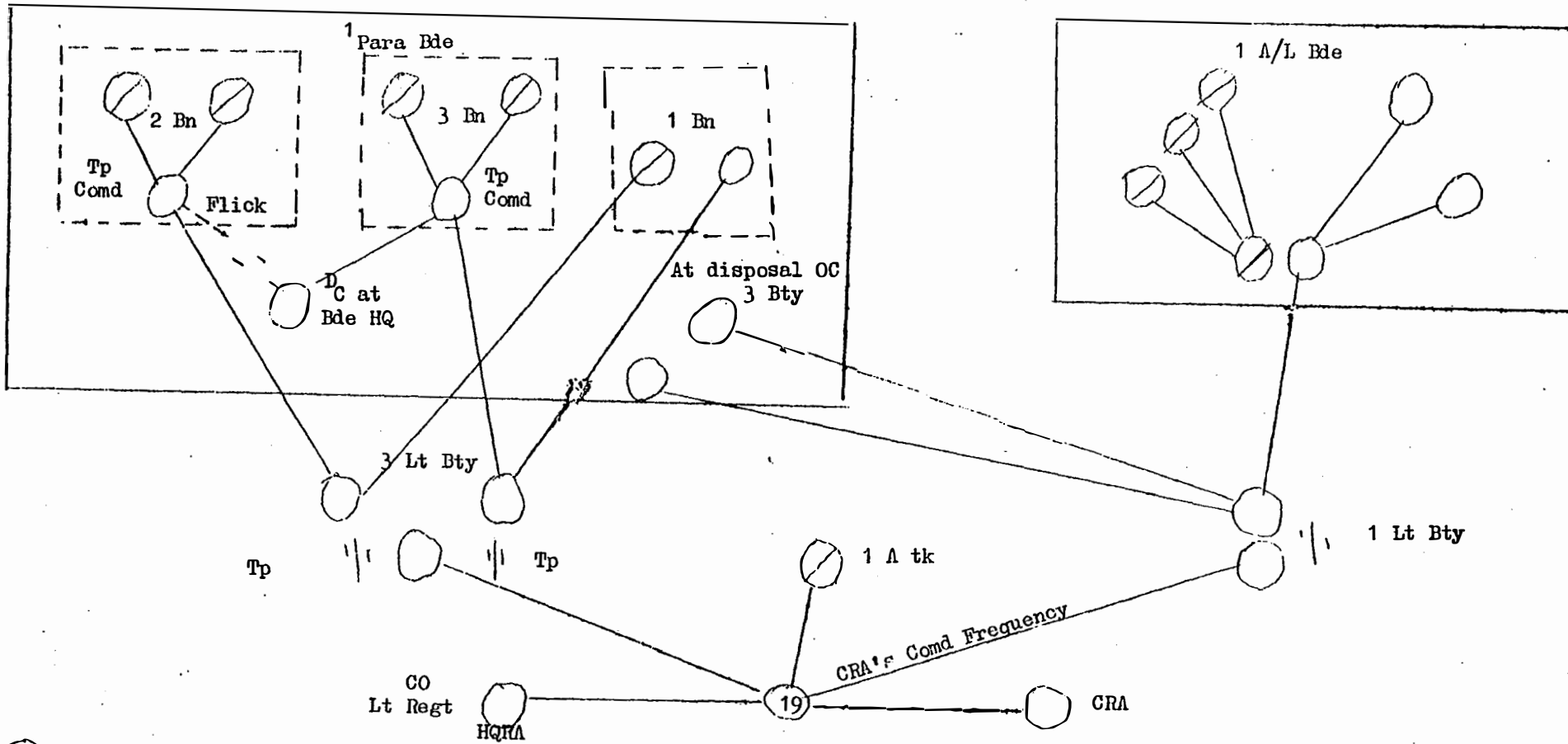
(b) The net result was to produce a ring of fire about 500^x round the Div perimeter. The programme included fairly intensive fire from 2000 - 2300 hrs with spasmodic cones between 2300 hrs and 0400 hrs.



Every available Regt was employed and the results were most satisfactory. The enemy made no attempt to follow up the withdrawal and very little interference was experienced from mortars or guns.

It is more than probable that the enemy thought that 30 Corps were reinforcing the bridgehead as opposed to the withdrawal of 1 A/B Div.

WIRELESS I AGRAM 1st LIFT.

APPX 'A'



-  = 68 set
-  = 22 set

RED = FOU
 GREEN = Lt Regt
 BLUE = E Sec and 1 A tk

30 CORPS ARTY SP.

1. Communications and Method of Link Up.

During planning three 30 Corps Arty Regts had provisionally been allotted to sp 1 A/B Div as soon as in range.

At each Bde HQ the FOO control sets had set their flick frequency on to the command frequency of one of those Regts.

Their sets had their primary frequencies netted on the CRA 1 A/B Divs comd net on which were also tuned (but not netted) the four FOU reps who were with 30 Corps.

On Thursday 21 Sep the FOO control with 1 A/L Bde heard on his flick frequency the command net of 64 Med Regt. He immediately came up on the net with his 22 set and after certain identity difficulties, was recognised. HQRA 1 A/B Div immediately put a HP 19 set on to their comd set and first class communication was established. This R/T communication never broke down. During the day time it was invariably strength 5, and by means of a relay station on the South bank of the river, speech was kept working throughout every night. Owing to the failure of the FOU reps to establish satisfactory communication, all calls for fire were put through on the comd class control and strictest wireless discipline were responsible for its success.

2. Types of Tgt.

- (a) Enemy attacks by small battle groups in various stages and usually consisting of about one coy Inf with 2 or 3 tanks or SP guns.
- (b) Enemy mortars, M.Gs and S.P. guns.

An unusually large proportion of these were close tgts within 100/200 yards of our own tps. During the latter half of the battle, there was extremely close contact both in the woods and built up area; infiltration was constant and by the last day the enemy succeeded in establishing himself strongly in a wood within the Div perimeter and this also became a tgt for the Mediums, our own tps being 200/300 yards all round the wood.

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2. Types of Tgt (Cont'd).

Owing to the closeness of the country observation became quite impossible for tgts even a little way behind the enemy front line. Close shoots in front of our own inf became the usual order of the day, and it was the accuracy of the medium and by arty shooting that made their engagement so effective. At no time did inf stop calling for fire despite a few unpleasantly close rounds. Many tgts were called for by map references off a 1/25,000 map which proved most accurate.

3. Method of Call and Control.

Two A/B stations were established on the cmd net of 64 Med Regt. One was the 22 set of the FOO control at 1 A/L Bde, the other a HP 19 set at HQRA.

From an early moment it was discovered that the 22 set was much less effective on the net than the 19 set. For this reason, in addition to the necessity for control by CRA, all calls for fire by the FOO control were first made to HQRA 1 A/B Div on this net, who at its discretion passed them for action to RHQ 64 Med Regt. This proved quite feasible and quick.

Many calls for fire came in from units of the Div over the "G" comms. These were relayed by CRA through RA channels.

Meantime other calls for sp came in to HQRA on the CRA command net. They originated from various OPs that were put on this set and also from the RHQ Lt Regt passing on its demands from its OPs, or, later on, on its own account.

There were thus three main sources from which demands for fire were reaching HQRA.

- (a) From the FOO control with A/L Bde on the 64 Med Regt net.
- (b) From GOCs command post, edited by the CRA on the direct line.
- (c) From the Lt Regt and OPs on CRAs command net.

Two tgts were constantly being engaged as a sandwich shoot and on several occasions even three simultaneous shoots were effected. It was often possible when communications were good to allot one or more Btys direct to FOO control A/L Bde who could then give fire orders direct on the net, but all other shoots had to be relayed by HQRA 1 A/B Div and RHQ 64 Med Regt on the same net.

In addition to its own Btys which included a 155 mm Hy Bty and a Bty of 7 Med Regt, RHQ 64 Med Regt also did, call on Fd Regts of 43 Div Arty using the CRAs 43 Div cmd net.

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3. Method of Call and Control (Cont'd)

In view of the above, it was clear at an early stage in the battle that the strictest control by CRA 1 A/B Div was essential. Amn difficulties of 30 Corps and the natural desire by every sector of the Div perimeter for maximum sp made strict control by CRA a necessity.

4. Allotment of amn.

When communication was first made, CCRA 30 Corps allotted 40 rpg for Fd and Med Arty and 20 rpg for Hy arty daily to sp 1 A/B Div.

This amount seemed small until the L of C difficulties of 30 Corps were realised, and in any case the amount fired was far greater than this provisional allotment.

A very large allotment of amn by arty supporting an A/B Div was always considered to be necessary and this operation proved it.

5. Procedure.

Normal Mike and Uncle tgt fire discipline procedure was used. Results proved that there is no need to deviate at all.

Tgts were all numbered as MZ tgts to prevent confusion. The numbers were allotted by HQRA 1 A/B Div and relayed normally by RHQ 64 Med Regt. HQRA relayed the numbers and data to FOO control A/L Bde and to the Lt Regt and other OPs on the CRAs cmd net.

40 MZ tgts were recorded during the battle; the earlier ones gradually becoming obsolete as the perimeter grew smaller.

Control of 43 Div Arty Fire by the Lt Regt.

On the last morning an OP from one of the 43 Div Fd Regts crossed the river with the DORSETSHIRE Bn. He arrived with a 68 set at the Lt Regt HQ who immediately gave him a 22 set to put on his own Regtl. Cmd Net.

The Lt Regt were given control of this OP and put all their calls for sp direct to CRA 43 Div via his Regt.

This proved most satisfactory and lightened the traffic on 64 Med Regts net and provided two links to 30 Corps arty instead of one. If necessary HQRA could put calls to 43 Div Arty using CRAs cmd net to the Lt Regt who then passed it on by this OP.

PART II.

CONCLUSIONS WITH REGARD TO FUTURE OPERATIONS.

A. PLANNING.

1. The C.R.A. together with B.M.R.A. were permanently with Tac Div HQ during planning. As a result of planning 16 operations in June, July and August, a complete drill and sequence of events was devised for planning any operation (Appendix "A"). This proved a tremendous asset and not only did it lead to greater efficiency and better briefing, but saved considerable time, which in many cases became an essential factor.

2. It has always been stressed that the CRA must visit personally the CCRA or CRA of the relieving formation. This would have helped considerably in 'MARKET'. Points to be considered at this conference are shown in Appendix 'B'.

The C.R.A. must take with him a liaison officer from the FOU who can be left behind to visit Regts and tie up all the details, and act as L.O. with CCRA or CRA during the operation.

3. In 'MARKET' the tie up with 30 Corps regarding frequencies - call signs - codes etc. left much to be desired.

(a) Important information and messages were held up owing to a delay in obtaining a common slidex; in future BOTH sides must have each others slidex.

(b) Had we had the frequencies of 43 Div Regts, a set could have been put on their command nets earlier. The A/B Div must know the command net frequencies of all the Regts likely to be in range. Frequencies of A/B Div must be carefully checked beforehand with the other formation. In one case two sets at one HQ were trying to work on two frequencies only 10 Kcs apart.

(c) There was delay in recognition over the air with 64 Med Regt, as a result of them not having our call signs or a pre-arranged code word.

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B. ORGANISATION AND EQUIPMENT.

1. Light Regiment.

(a) Local Protection.

During the latter stages the gun area became part of the Div perimeter, particularly after the infiltration by SP guns and Inf.

The gun detachments were all playing their part in repelling inf attacks with small arms and taking on the SP guns over open sights with the 75 mm How. The latter is known to have accounted for two tanks (claimed as Tigers) with A.P. at ranges under 150^x.

This action proved beyond doubt that in future a larger number of L.M.Gs are required and that a substantial number of PsiAT must be carried.

As regards training, it is most apparent that more attention than ever is required in Inf training and tactics and that in addition Officers and N.C.O.'s must be trained on all weapons including the 6 pr. Cases arose of other weapons being manned by Lt Regt personnel but without the best effect, owing to lack of knowledge of the weapon concerned.

(b) Communications.

(i) The 22 set proved adequate for internal use, but the 68R was a failure. The sets were all in communication on landing, but once movement of the LZ started, communication failed owing to lack of range under difficult circumstances. This was found to be universal with all 68R sets in the Div. It is proposed to find by trial an alternative. The S.C.R. 300, 610 and 694 are all possibilities.

(ii) The charging of batteries with the 300 watt dynamo was most successful throughout.

(c) 75 mm Equipment and Amn.

No difficulties were experienced and the guns stood up to it well. They are undoubtedly excellent for close sp owing to their accuracy but no weapon for engaging tanks even in an emergency owing to lack of shield, traverse and sighting.

The A.P. was effective in two cases at extremely close range. The HE and Smoke were satisfactory.

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(d) Transport.

As a result of the limited number of spare wheels that can be carried it is strongly recommended that all Jeep, gun and trailer wheels should be made interchangeable. A great number of tyres and wheels were damaged from mortaring and replacements were far from sufficient.

2. Anti-Tank Artillery.

(a) Organisation.

52 x 6 prs and 16 x 17 prs were taken airborne. This is a total of 68 guns against the W.E. of 56.

In planning operations the W.E. of 56 has always been inadequate, and in addition the present organisation requires re-adjustment to allow for the inclusion of 17 prs in sp of all three Bdes and also to cater for a reserve of guns for protection of Div Tps and for defence in depth. It was the Div reserve which became the backbone of the A.Tk defence.

(b) PIAT.

Owing to the extremely close nature of the country, it was only possible with the limited number of guns to cover the main approaches and open ground. This resulted in infiltration of the individual S.P. guns or tanks through built up areas and woods.

There were continual demands for 6 pr guns to go forward on sniping expeditions. These were all refused except in two cases of real emergency. In the first case the SP gun was accounted for; in the second the 6 pr was hit first. The answer in all cases having no SP guns of our own is to despatch a tank hunting party with a PIAT.

In consequence it is most strongly recommended that in Airlanding A.Tk Btys all detachments carry a PIAT and are trained in addition as tank hunting teams.

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(c) Tractors for 17 prs.

The Morris 30 cwt is an unreliable and unsatisfactory tower. At present no substitute has been found, which will fit in the Hamilcar. This is a most urgent requirement as continual breakdowns are experienced with these vehs by all concerned.

3. Counter Mortar.

Location of enemy mortars becomes of primary importance immediately Corps Arty is in range and capable of engaging counter mortar tasks. Prior to this it is not feasible to use up the limited Lt Regts amn in this way.

However, if counter mortar tasks are to be engaged with satisfaction a counter mortar organisation is required as in other divisions. The FOU is not capable of satisfactory results on its own or without the mechanical methods of mortar location.

The enemy mortars at ARNHEM were one of the main menaces and little counter mortar was carried out owing to lack of amn and the difficulty of obtaining any accurate mortar locations, despite various attempts of plotting sound bearings.

4. Forward Observation Unit (Airborne)RA.

(a) By the time the 30 Corps arty was in range (D + 4) the FOU layout had to be improvised, and therefore the organisation was not really tested. However, from the experience obtained this does not warrant any changes, and the requirement of an FOU as part of the establishment is more than proved.

(b) Communications.

- (i) It is proposed that all 22 sets should be replaced by 19 sets. The difference in performance was very considerable.
- (ii) The four sets from the FOU at HQRA A/B Div should be either a 19 H.P. or even a Canadian 9 or equivalent. The latter are at present under trial in this Division.
- (iii) The remarks in 1(b) above apply also to the 68 R in the FOU.
- (iv) It is not intended to change the communication layout or organisation (Appendix 'C').

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(c) Deployment.

- (i) It will not be normal to provide officers and sets with Regts. The circumstances under which this was done was exceptional owing to the Divs seaborne element already being overseas. However, a responsible L.O. with the supporting formation's HQ is considered essential.
- (ii) On future occasions every effort should be made to have a high powered set on the FOU net in an armoured car or tank OP, which can move right forward with the leading tps as an intermediate station.

5. Corps Artillery.

(a) Priority.

When Regts are made available to sp an A/B Div it is essential to differentiate between Regiments, which are available to respond to any call at any time and those which will reply if they are not engaged on other tasks in sp of their own formation. It is the first category which are required for D.F., immediate counter attack tasks or any pre-arranged attack, and dependent on which all fire plans defensive or otherwise within the A/B Div will be based.

(b) Allotment of Amn.

Difficulty was experienced in obtaining an estimate of amn available. This again is so necessary to the A/B CRA so that he can sub-allot for fire plans, counter mortar and other tasks.

6. Correction of Fire by Other Arms.

A considerable number of shoots were carried out by the infantry and recce sqn. The basis was the Mike target procedure, which varied slightly, but the results were most satisfactory. This operation merely emphasised the necessity of training other arms in correction of fire as is confirmed by any operation.

APPENDIX 'A' TO PART II.

DETAILS OF PLANNING FOR RA STAFF BEFORE AIRBORNE OPERATION.

1. Get from 'G' rough layout of Bdes, and make HQ RA trace of it (1/50000).
2. Get rough glider allotment and decide who is not able to go. Despatch to units forthwith.
3. Obtain, if possible, 1/25,000 maps and make 1/50,000 trace of Div. A. Tk layout, giving detailed layout for Parachute Bdes and general layout for Airlanding Bde.
Get GOC's approval of this layout and then make at least 35 copies of trace.
4. Put in bid for lashing gear transport (17 x 3 tanners) and warn units how much they are getting.
5. Put in bid for transport to lift units to airfids (24 x 3 tonners required but incl 17 in para 4).
6. Order units to send rep (Officer or Sgt and O.R.+Jeep) to HQRA for map plan 'A' (detailed distribution on maps on Bty Level). Arrange special transport (C.47) to bring a few maps to permanent area for early briefing.
7. Prepare march order for move to airfd (RA gp is possible).
8. Extract details of RA units from Air Movement Table (Form 'A') and send out early to units. At same time demand from units Forms A-B by a certain time and give them list of all other units landing on their LZs.
9. Tie up with 'G':-
 - (a) Tactical order of landing on each LZ.
 - (b) Local protection for Lt Regt between LZ and gun area.
 - (c) Action of glider pilots.
10. Warn FOU of time for FOOs to join Bns.
11. Put in order to 'G' (Int) for photos and enlargements of air covers. (At least one big enlargement per bty and HQ).

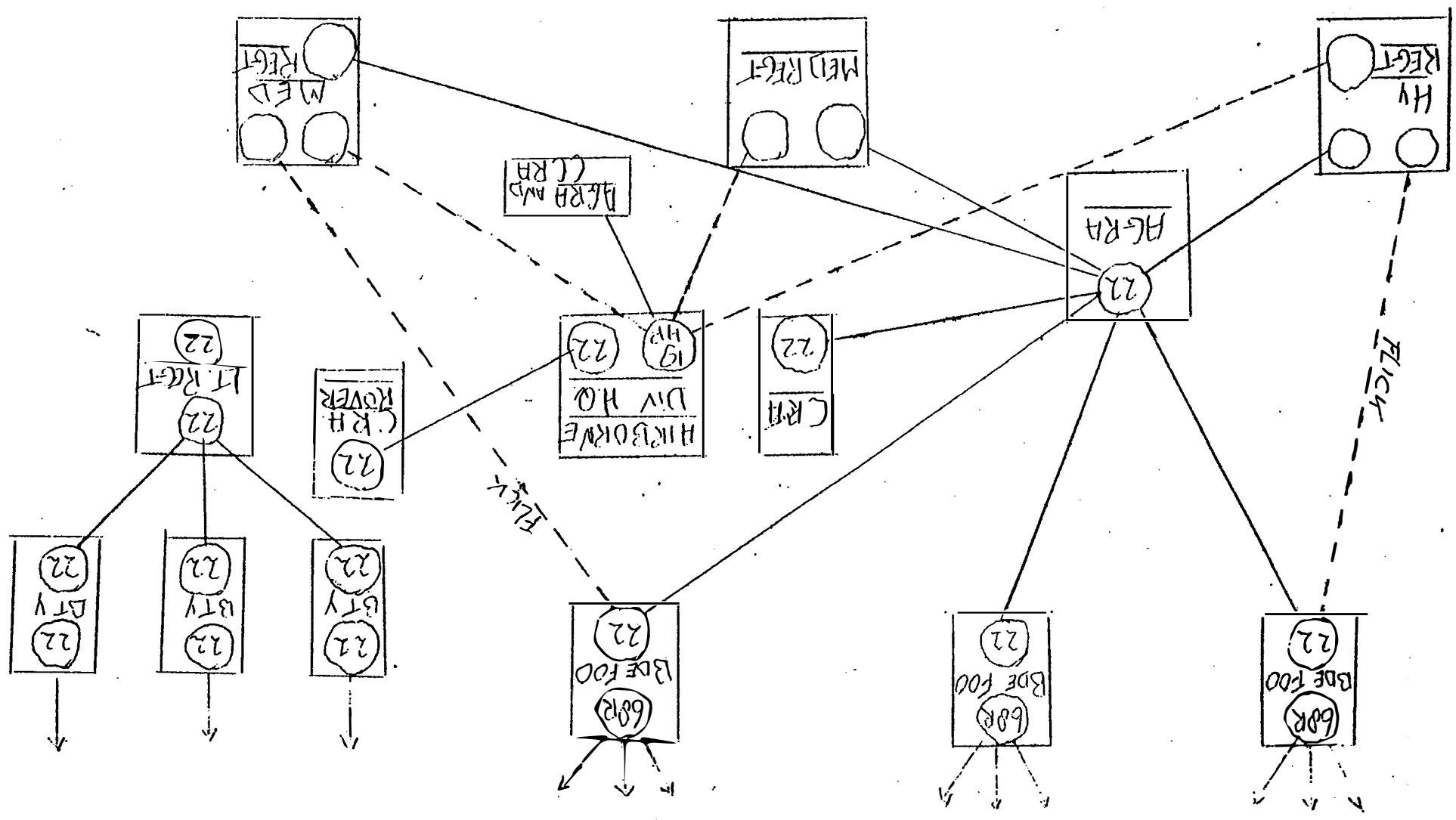
.... /2.

12. Write RA Operation Instruction incl Trace I showing CRA's A.Tk layout and Trace II showing Div layout, gun area, DZs and LZs etc.
 13. Send out warning order for CRA's 'O'Gp to meet 90 minutes after GOC's 'O' Group.
 14. Distribute RA Op Instruction to Bdes at GOC's 'O'Gp. Get times of Bde Comds 'O'Gp.
 15. Hold CRA's 'O' Gp incl orders and arrangements for netting. Discover time of Lt Regts 'O'Gp.
 16. Arrange for HQRA Officers.
 - (a) to attend Lt Regts 'O'Gp and
 - (b) to discover A.Tk Btys detailed plans, after Bde 'O'Gp.
 17. If possible get A.Tk traces from 6 pr Btys, 17 pr Gp and Airlanding Bde.
 18. CRA visits Bde to see if any difficulty arisen in A.Tk or Lt Arty plans.
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POINTS FOR DISCUSSION BETWEEN CCRA AND CRA A/B DIV.

1. R.A.Regts allotted by CCRA.
 - (a) Time likely to be in range.
 - (b) Allotment of amm per Regt.
 - (c) Does A/B Div have prior claim on sp for D.F.and immediate counter attack tasks.
 - (d) Forecast of gun areas and zones of Hy Btys.
 2. Additional R.A.Regts likely to be in range, and able to sp when not required to sp own formation.
 3. Communications.
 - (a) Signal diagram and layout.
 - (b) Arrangement for step-up sets in Armd OPs with leading tps.
 - (c) Check that inter-change of ALL call signs, frequencies, slidex and codes likely to be required, had been arranged by R.C. of Sigs reps. Times of changing etc.
 - (d) Arrangements for wireless control and netting.
 4. Arrangements for Recognition.

R/T, Light Signals etc.
 5. Pre-arranged D.F. tasks to cover A/B perimeter.
 6. Latest O.B. list.
 7. Arty plan for counter flak during fly in.
 8. Arty R or OP to deal with flak during fly in or for counter bty or counter mortar at a later stage.
 9. Arrangements for flying in Air OP to A/B perimeter if required.
 10. Availability of coloured smoke for air sp.
 11. Action on relieving formation joining up, and allotment of Arty to come under comd A/B Div
 - (a) Field and Medium.
 - (b) A.Tk particularly S.Ps.
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HAWAIIAN B

R A & CIVIS

PART III - AIR SUPPORT.

1. Responsibility of C.R.A.

In the Airborne Div the C.R.A. was made responsible for the co-ordination of all demands for air sp. The main tentacle whether British or American was to be with Div HQ and any others available would be sent out to a Bde.

2. "G" Officers.

In training it was not found practical to overload the HQRA staff with the additional duty of controlling air sp. It was therefore decided to make available a "G" Staff Offr (the G.II(air)) to control air sp under the general direction of the CRA.

3. Methods of Call.

Calls from Bdes would come via "G" channels to Div, but if these failed R.A. comms (both Lt Regt and FOU) were an alternative means.

4. Communications with Second Army.

The two American veeps taken in did not succeed in making satisfactory communication with their counterparts at HQ Second Army. This may have been due to long range, and unfortunately later when distances were growing less, the sets were destroyed by mortaring.

Demands for air sp were then sent by:-

- (a) Phantom to Second Army.
- (b) The RA link to 64 Med Regt.

They were sent in the normal demand form and were passed on as quickly as possible. However, this resulted in an unavoidable delay but there is no doubt that the air sp demands were received and during the last two days they were answered.

5. Comments for the Future.

- (a) Arty R. was requested but did not materialise. This could have been of considerable assistance in
 - (i) Counter mortar and counter battery.
 - (ii) Counter flak during re-supply.

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5. Comments for the Future (Cont'd).

- (b) In addition to the tentacles at Div and Bdes on the A.S.S.C. net, it was requested most urgently before the operation that a V.C.P. should be made available to fly in. This did not materialise but is required more than ever for the future, particularly if there is the prospect of a "cab rank" being established, or if it can be used for ground/air communication in connection with re-supply by air.
- (c) Had a V.C.P. been available and briefing in the air possible, the possibility of flying in 25 prs for the purpose of putting down coloured smoke was under consideration. However, to avoid this in future, further investigation is necessary regarding coloured smoke for 75 mm How.
- (d) Pre-arranged bombing tasks to sp the initial landing were not tied up until 12 hrs before take off. This resulted in Bde and Bn Comds landing without a full knowledge of what air sp would be forthcoming. This particularly affected 1 Para Bde who required sp against the numerous 88 mm gun posns in ARNHEM between H and H + 2.

It is considered that this should have been finally tied up at least two days before.