NOTE

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HISTORICAL SECTION (G.S.)

REPORT NO. 74

ARMY HEADQUARTERS

5 Jul 55

Offensive Air Support of First Canadian Army during Operations in North-West Europe

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REPORT NO. 74

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- the planning and control of the air support which was provided First Canadian Army during its operations in North-West Europe. To avoid duplication, developments in this field which are already recorded in existing reports are summarized very briefly, with cross references to the appropriate report.
- 2. As the title states, the report is limited to offensive air support. Air transport support is not dealt with, since the Canadian Army had no direct and important connection with this form of support during its operations in Europe. The administrative support provided the air force by the army is likewise excluded. Certain aspects of this work, especially air field construction, had an important influence on offensive air support. It is not possible, however, to record this influence adequately from the limited information available. It may be that air force records contain more nearly complete information on the matter, since it was of more intimate and direct concern to the air force than to the army. In any event, it would be better to deal with administration separately. Its inclusion in the present report would represent a further complication of a subject which is sufficiently complex without it.

DEVELOPMENTS PRIOR TO D DAY

By the beginning of 1944, H.Q. First Cdn Army was in a reasonably good position to do its share in the planning and control of whatever air support was assigned to it during the impending operations in North-West Europe. Under Gen McNaughton, the Canadians had closely followed the development of War Office policy on air support of ground operations. They had also experimented with air support in various exercises, sent officers on air support courses and kept generally parallel to the British in the organization of staff sections and units especially concerned with air support. In view of the rather strained relations which subsequently developed between army headquarters (both Canadian and British) and their associated air force headquarters, it would appear fortunate that so much had been done in advance of active operations.

Air Support Doctrine and Organization, February 1944

- Before describing the final stages prior to D Day of First Cdn Army's preparation for the use of air support, it is necessary to record certain facts about the then-current British policy on the organization and command of tactical air forces, and the doctrine which governed their co-operation with ground forces.
- The Second Tactical Air Force (2 TAF) had been organized in 1943 to support ground operations in Europe. It contained two Composite Groups (Nos. 83 and 84), one group of medium bombers (2 Gp) and a reconnaissance wing. 2 TAF, with the U.S. Ninth Air Force and Air Defence of Great Britain (formerly Fighter Command), were grouped under H.Q. Allied Expeditionary Air Force (A.E.A.F.). The American and British strategic bombers based in England remained at the disposal of the Combined Chiefs of Staff. (Hilary St G. Saunders, Royal Air Force 1939-1945: Vol III: The Fight is Won (London, H.M.S.O., 1954), pp. 85, 89)
- organized to provide support in the form of reconnaissance sorties or attacks on ground targets.* To that end, each group was provided with one reconnaissance wing and a number of fighter, fighter-bomber and fighter-rocket projectile wings. The staff of H.Q. 83 Composite Gp and as many of the aircraft as could be spared from operational tasks had been training in co-operation with ground forces since mid-1943. 84 Composite Gp, on the other hand was still organizing in February 1944. At that time, it contained -- or was planned to contain -- No. 35 Reconnaissance Wing and Nos. 18, 19, 20 and 23 Fighter Wings. The squadrons of the fighter wings were Polish, Norwegian, Czech, Belgian and French. ((H.S.) 215Cl.093(D2): "Air Sp, First Cdn Army" Address by A/V/M. Dickson, 7 Jun 43; (H.S.) 219Cl.009(D 126): "Org and Adm, Composite Gp RAF", ff 72-76)
- Turning now to the doctrine which governed the command and control of air support, we must note at the outset that both command and control of British tactical air forces remained with the air force. The idea was to associate composite groups with armies and tactical air forces with army groups. This association produced parallel but independent chains of command. Only at the level of the Supreme Commander did these chains unite in one competent command. The ground commanders and staffs at army or army group level met as equals with their air "opposite numbers" to plan

^{*}Provision of this support was a secondary role of the tactical air forces. Their main responsibility was the establishment of a favourable air situation over the battlefield -- the winning, in other words, of local air supremacy or at least superiority. When this had been done, the other forms of support could be provided.

operations in close association. The agreed plan was then translated into air force and army orders, and these took separate courses down the parallel chains of command. When planning at army/composite group level revealed a requirement for a greater scale of support -- or for heavier support -- than could be furnished by the associated group, requests for this additional support were sent back to army group/tactical air force on both the army and air force channels. ((H.S.) 215Cl.091; "Air Sp N.M. Europe - Maj Gen Mann", paras 3-19; Dickson, p.2)

- The headquarters of both of the composite groups and of the tactical air force were organized into main and rear sections, to facilitate operations with their associated main and rear army or army group headquarters. Like the army, the air headquarters were to be equipped with tents, and with caravans and other necessary vehicles to make them completely mobile. For purposes of this narrative, interest centres on the main headquarters of the composite group, designed to work with the main headquarters of the army with which the group was associated. (Dickson, p.2)
- At this level, a pairing of commanders and staff officers had been established. The army commander, though he outranked the air commander, was paired with the Air Officer Commanding (A.O.C.) the composite group. The Brigadier General Staff (B.G.S.)* worked with the Senior Air Staff Officer (SASO) and so on down the staff hierarchy. On the army side, air sections of progressively increasing size were provided in the staffs of the headquarters of armoured divisions** (but not of infantry divisions), corps and armies. These Air staff officers, with associated Intelligence staff officers, were responsible for the army's share in the routine of planning and controlling air support. Only at army headquarters level, however, was the air force represented. ((H.S.)312.009(D31); "Op Commitments, First Cdn Army" -- Notes for Interview with Army Comd by G.S.O. 1 (Air))
- Below Group Headquarters in the air force chain of command was the Group Control Centre (G.C.C.). This organization was responsible for detailed direction and control of operations ordered by Group. Airfield and wing headquarters within the Group were

^{*}By February 1944, the appointment of B.G.C. had been replaced by that of Chief of Staff (C. of S.). This officer, a brigadier, was "opposite number" to the SASO. The appointment was held throughout the campaign in North-West Europe by Brigadier C.C. Mann. Col G.E. Beament was Col G.S. for the same period.

^{**}British armoured divisions did not have an air staff officer.

linked to G.C.C. by an elaborate air force signal system, to enable the centre to exercise effective control. (Dickson, p.3 and Appx "A")

- airfield complex was achieved through air liaison officers. These were army officers specially trained in air support and stationed at G.C.C. and at wings. They were responsible for providing the air force with information on current ground operations, briefing pilots for sorties, interrogating them on their return and similar duties. An army signal system, provided by an air support signals unit (ASSU), operated forward links between lower formations and the air staffs at corps and army, and rear links to G.C.C. and wings. (Notes for Interview with Army Comd by G.S.O. 1 (Air); (H.S.) 215C1.093 (D2): "Air Sp, First Cdn Army" -- Org and Emp 1 Cdn ASSU, 8 Mar 44)
- 12. Such, in brief, was the British command and control doctrine, and the organization designed to give it effect. At the time of which we write -- the middle of February 1944 -- a good deal remained to be done before the situation envisaged by the formal doctrine was achieved. 84 Gp, paired since the end of January with First Cdn Army, was still organizing. The army, on the other hand, possessed all the necessary staff sections and units. This army organization had to be "married up" with the air organization when the latter had assumed sufficiently definite form. Planning and control procedures for all levels had to be worked out and established as "drills"; mutual and understanding had to be achieved. All this, moreover, had to be done at a time when other concerns placed very heavy demands on the air and ground staffs, and when the area of common interest and effort was at a minimum.

Pairing First Cdn Army/84 Composite Gp RAF

- On 9 Mar 44, Tac H.Q. First Cdn Army was set up to concentrate on the final stages of the "OVERLORD" planning (W.D., G (Ops), Tac H.Q. First Cdn Army, 9 Mar 44). 84 Gp was supposed to establish a similar planning body in the same location, but had not done so by the 25th of the month (ibid: Appx "18" -- Col G.S. to C. of S., 25 Mar 44).

A survey of what happened during the first part of March in respect to air force participation in the planning is illuminating. On 4 March, 84 Gp had requested accommodation for 10 officers and 12 clerks, and had agreed to begin joint planning five days later. Col Beament telephoned the Group on 10 March, to learn why their planning representatives had not arrived. He was informed that 84 Gp had received no planning directive, and had decided against joining the army's planning headquarters. 21 Army Gp, when approached on the matter, agreed to take the question up with 2 TAF. On 13 March, 21 Army Gp reported that 2 TAF had agreed to issue a planning directive to 84 Gp which would require the latter to plan jointly with First Cdn Army Gp on the matter, since nothing had happened in the interval.

Next day, 21 Army Gp reported that 2 TAF had been under the impression that joint planning was already in progress, and, on learning that such was not the case, had undertaken to direct 84 Gp to begin joint planning forthwith. On 25 March, Col Beament learned that 84 Gp would not plan build up priorities jointly with First Cdn Army, since the Group's planning was being controlled by 2 TAF, but that it would move to Headley Court on 1 April. Thus, after more than three weeks of effort, First Cdn Army finally learned the arrangements which were to govern what little joint planning it was to do with 84 Gp. (ibid)

16. On 27 March, a Group Captain Oliver and a Squadron Leader Deacon-Elliott arrived at Headley Court from 84 Gp (ibid, 27 Mar 44). However the very narrow field of common planning interest made these two officers function more that of liaison officers than associate planners. This is clearly reflected in the minutes of a meeting called by Col. Beament and G/C Oliver on 30 March (ibid: Appx "16" -- Minutes of Meeting at Headley Court, 0930 hrs 30 Mar 44).

17. At this meeting it was confirmed that the army and the air force would plan their respective moves to the continent separately. Advance parties from 84 Gp and an anti-aircraft brigade, however, were to move with H.Q. First Cdn Army. Air reconnaissance was centralized, and it would be necessary to deal with 21 Army Gp for air photo coverage and joint training. The Army would be required to pre-stock 84 Gp's airfields, but the landing ground schedule was still under discussion "on a high level". Also the question of responsibility for calculating stores tonnages had yet to be settled. Joint planning, in other words, was to be limited both by the large amount of work which each headquarters had to do independently and the lack of firm decisions on matters of common interest. (ibid)

While this was going on, efforts were being made in other directions to prepare for co-operation with 84 Gp. The Operational Standing Orders of Main H.Q. First Cdn Army were issued on 1 Apr 44 (W.D., G (Ops) H.Q. First Cdn Army, April 1944: Appx "2" -- Op Standing Orders, Main H.Q. First Cdn Army). These reflected considerable advances over a set of provisional orders issued on 7 Feb (W.D., G.S. Branch, H.Q. First Cdn Army, February 1944: Appx "14" -- Op Standing Orders (Provisional), Main H.Q. First Cdn Army). In the April

orders, morning and evening joint conferences had replaced the conferences of the Army Commander and the Chief of Staff shown in the earlier version. In the layout of the Main Battle Room, both sets of orders provided space for air force staff officers. On 5 May an Appendix "S" to the Standing Orders was issued (ibid, May 1944: Appx "6" -- Appx "S" to Main H.Q. Standing Orders). It defined the procedure to be followed in the Joint Battle Room, and bore the note that this procedure had been mutually agreed on 1 May 44. Subsequent appendices clarified additional matters of comperation with 84 Gr.

The day after the issue of this Appendix "S", Exercise "FLIT" began. Its object was "to practice the deployment and working in the fd of H.Q. First Cdn Army/84 Gp R.A.F." (ibid: Appx "50" -- Ex "FLIT", Main H.Q. Report). Previously, on 17 April, Exercise "JOINT" had been conducted on a somewhat smaller scale to "test the op of the Main Battle Room and the Joint Operations Room" (W.D., G (Ops) Tac H.Q. First Cdn Army, 17 Apr 44). Personnel from 84 Gp, whose main headquarters had located itself near H.Q. First Cdn Army on 1 Apr (ibid, 1 Apr 44), took part in "JOINT".

Exercise "FLIT" lasted for five days. Two portions of the report on the exercise are available (W.D., G.S. Branch, H.Q. First Cdn Army, May 1944: Appx "50", "53"). These indicate a greater precocupation with details of the operation of the headquarters than with the planning and control of an air effort. Notes on the first Joint Evening Conference, however, show that this planning was in fact done, though perhaps not so realistically as in actual operations (ibid: Appx "14").

AIR PLANNING - 23 JUL TO 25 SEP 44

From D Day until the end of July, H.Q. First Cdn Army had a rather tenuous connection with the air force. Delay in expanding the lodgement on the continent made it impossible to move all of 84 Gp's wings out of England as quickly as had been planned. First Cdn Army was, in consequence, bereft of its air partner until the middle of August (para 31 below). G/C Oliver was with the advance party of H.Q. First Cdn Army for a while, but returned to England early in July (W.D., Plans Sec, H.Q. First Cdn Army, July 1944: Appx "A" -- Minutes of C. of S. Conference, 4 Jul 44). On 22 July Brigadier Mann announced that there would be direct line communication between First Cdn Army and 83 Gp (ibid, 22 Jul 44), and at the end of the month a joint policy for air support was issued by the two formations (H.S.) 215Cl.(D317): "Directives to First Cdn Army" -- top folios). This provided for what amounted to virtually independent operations by the Group in the depth of the enemy-held territory. However the pattern of air attacks was to be such as to assist First Cdn Army, either in a defensive role or in an advance along the Caen-Falaise or Caen-Vimont-Mezidon roads. (ibid)

Operation "TOTALIZE"

The start of the planning for Operation "TOTALIZE" brought First Cdn Army's period of relative

seclusion from the air effort to an abrupt end. The air arm was assigned an important role in the operation; this fact, coupled with the short time given for the planning, resulted in a substantial proportion of the work in the headquarters being devoted to arranging air support.

The part of the planning which concerns the employment of heavy bombers has already been outlined (Hist Sec, A.H.Q., Report No. 65, Canadian Participation in the Operations in North-West Europe, 1944, Pt III: Canadian Operations, 1-23 August, paras 22 - 30). It might be well, however, to describe some parts of this planning process in greater detail, in view of the light they shed on the system used to arrange this heavy support, and the experience which was gained from the operation.

Although the main features of the air plan for Operation "TOTALIZE", including the use of heavy bombers at night, originated with General Simonds and his staff (ibid, paras 22, 23), responsibility for working out the detailed request for heavy bomber support* fell on the staff of H.Q. First Cdn Army. This staff was supplemented by attachment of the B.G.S. (Flans) from H.Q. 21 Army Gp (ibid, para 28). In addition, the army staff had the advice of the SASO and G/C Ops of 84 Gp during the initial stages of making out the demand (W.D., Flans Sec, H.Q. First Cdn Army, 1 to 4 Aug 44). On 4 August, this air advice was extended to a very high level when a party of senior air officers, led by Air Chief Marshal Sir Trafford Leigh-Mallory, went over the whole plan during a conference at H.Q. First Cdn Army (ibid, August 1944: Appx "3" -- Memo of Fts arising at a Conference held at H.Q. First Cdn Army at 1700 B hrs 4 Aug 1944).

Next day a group of staff officers from First Cdn Army, led by the Chief of Staff, went to England. Here the plan was discussed again at H.Q. A.E.A.F. (A.H.Q. Report No. 65, para 28). The SASO (S.B.) of Bomber Command attended this meeting, which was presided over by Leigh-Mallory. Although he suggested certain changes in the plan, the representative* of Bomber Command

^{*}The staff work involved in the preparation of this detailed request -- and of those for "TRACTABLE", "WELLHIT" and "UNDERGO" -- is not described in the sources available. It may be presumed that it followed the same general lines as that outlined in paras 50-57 and 120-133 below, in connection with "INFATUATE" AND "VERITABLE". Lack of experience quite probably resulted in this early work being done less smoothly and efficiently than it was later.

^{**}The SASO (S.B.) was a "representative" of Bomber Comd in a limited sense, since he was not authorized to accept commitments. This arrangement was maintained throughout the European campaign. Officers from Bomber Command who attended planning conferences did so as advisers. Plans made by the conference had to be submitted to the higher air force command for approval. The system, an inescapable consequence of the policy of maintaining command at the highest level, did not please the Army. It would have preferred quick decisions made on the spot by representatives empowered to accept binding commitments.

agreed that the idea of night bombing was practicable. Brigadier Mann then passed the details of what he believed to be the agreed plan to H.Q. First Cdn Army and, at the request of the SASO, remained in England to visit H.Q. Bomber Command the next day. (W.D., Plans Sec, H.Q. First Cdn Army, August 1944: Appx "6" -- Visit by C. of S. to the U.K. in Connection with Op "TOTALIZE")

26. His experiences there are best given in his own words:

At approx 1100 hrs we gathered in the C in C's office. The C in C stated that he was not prepared to bomb at night as planned and agreed upon by the meeting of the night before, and that there was no question of deviating from this policy. He gave, briefly, the reasons and explained that bombing in close proximity to the tps was done by OBOE and markers dropped by pathfinders with a check of the posn of the Pathfinder OBOE Marker by the "Master Bomber" who flies down sufficiently low to identify the target on the ground, drops another marker and orders 'bombs away'. The C in C explained that this could NOT be done at night.

The situation thus became extremely unsatisfactory: I stated that since orders were now being arranged on the basis of the agreements reached and notified last night that if the C in C was not prepared to sp the arrangements made on his behalf by his SASO (SB) that it would be necessary for me to telephone this infm to my Army Comd at once and that I considered it appropriate that the C in C Bomber Comd should telephone the C in C 21 Army Gp and infm him of his decisions since the tactical and strategic situation in NORMANDY had reached the pt where a delay in mounting this operation TOTALIZE might have most regrettable consequences as it seemed we were on the threshold of a great strategic opportunity.

The C in C stated that he had no intention of phoning the C in C 21 Army Gp. Silence reigned for approx a minute, and we then got down to discussions as to what Bomber Comd could do. From this pt onward the matter proceeded in a very satisfactory way and with evident desire on the part of the C in C Bomber Comd to assist with his resources in the Operation.

(Ibid, paras 12-14)

As a result of the discussion, it was decided to fire concentrations of coloured marker shells on the front of 1 Corps, to determine whether they could be clearly identified by the master bombers. The test proved successful, and Air Chief Marshal Harris then agreed to the night bombing. Messages to First Cdn Army from Bomber Command and A.E.A.F. settled final details, and at 2300 hrs on 7 August the bombing began (A.H.Q. Report No. 65, paras, 30, 55).

28. With the receipt of these last messages, First Cdn Army's share in the planning of the heavy bombing ended. Much, however, remained to be done within the higher echelons of the air force command. One of the matters settled at this stage was the day bombing, scheduled to begin at 1300 hrs on 8 August. It appeared that the prevailing incidence of morning fog might make it necessary for the Bomber Command aircraft to land away from their bases after the night bombing. This made it impossible to guarantee a sufficiently strong effort by Bomber Command aircraft on the following day. The day bombing was therefore accepted by the U.S. VIIIth Air Force ((H.S.)570.013(D 3): "Information from Air Historical Branch, Air Ministry"). A part of this American bombing was not accurate; bombs fell among our own troops. This unfortunate occurence was the product of several dircumstances, including haze over the battlefield, lack of experience on the part of the air crews and the effect of German anti-aircraft fire (ibid). None of the factors listed suggest any shortcomings in the planning process.

In addition to this heavy bomber support, H.Q. First Cdn Army had also to take part in planning the effort required from within the resources of 83 and 84 Gps.* This was done in conference with air staff officers of 83 and 84 Gps. The last meeting, held at 1100 hrs on 7 Aug, concerned itself with the air support policy for the operation, targets for fighter bombers, use of the Visual Control Post (discussed further below) and the neutralizing of enemy anti-aircraft batteries by our artillery ("APPLEPIE"). ((H.S.)215Cl.096(D 3): "Air Sp First Cdn Army Op 'TOTALIZE'" -- Agenda** of Air Sp Conference, Op "TOTALIZE", 7 Aug 44.)

30. On 11 August, during the course of "TOTALIZE", disagreement arose between the army and air staffs as to the acceptability of certain targets for

^{*}The division of air support into that to be found from within the resources of the associated group and that to be provided by other air formations was to prove characteristic of all subsequent air planning. Resources outside 84 Gp included, among others, the heavy bombers (at that time "at the disposal of" the Supreme Commander) and the bombers of 2 Gp (then based in England, but under direct command of 2 TAF and under A.E.A.F. as senior air headquarters). As we have seen, this latter type of support was usually arranged by "selling" requests for it to successively higher levels. Use of the resources of the associated group (or, more properly, of the portion of the associated group's resources allocated to the operation in question) was planned jointly at army/group level.

^{**}No minutes of this conference are available. In fact no adequate record (with the possible exception of the "VERITABLE" papers) is available of the planning of \$4 Group's effort prior to a large operation. The machinery used to arrange day-to-day support during an operation is, however, given in some detail at paras 60-74 and 99-116 below.

medium bombers. A report on the incident made by Brigadier Mann to General Crerar reveals in outline the procedure followed in arranging day-to-day air support from outside the resources of the associated group.

In this particular case, first thing this morning, and after preliminary conversations with the Col GS, I discussed [with 2 Cdn Corps] the possibility of employing med bombers (based in the UK) to further the 2 Cdn Corps intentions for today and in the immediate future.

The C of S 2 Cdn Corps, having consulted with his Comd, agreed that it would definitely be an advantage, and urged that we do so giving the gen area. We agreed that the details would be handled through the G Air Staffs at both HQ. I then tele, and at once, the SASO 63 Gp RAF and reported the plot to him giving him, moreover, an outline of the whole of the new strategic situation as it affects First Cdn Army, and emphasizing how desirable it was that we should damage the enemy substantially, both in a material sense and in a morale sense whenever the opportunity offered, and that the Comps Comd, whose views you supported, considered that this form of attack would further his intentions.

The SASO 83 Gp RAF, by his conversation, appeared to appreciate this and agreed with the proposed plan for employing:-

- (i) F/B's, particularly in the area nearest the CAEN FALAISE rd,
- (ii) And the med attack in the [Laison R.] valley as suggested which seemed to be a good idea.

The G Air Staff proceeded with the details, notifying them in the normal way to 83 Gp Ops.

In passing the intentions for today and the immediate future to BGS Ops 21 Army Gp, I infm him of the foregoing project, asking him, if the matter required decision as to possible priorities for the emp of 2 Gp (meds), to remember the importance of our being able to deal with this R LAISON posn as expeditiously as possible.

In the course of the morning the Col GS came to me, with considerable concern, to infm me that the matter was still "being considered by 83 Gp" and that "there was nothing definite about the arrangement".

I then warned the C of S 2 Cdn Corps that this was the situation, advising him that it was probable, as a result of the foregoing, that the attack would not actually take place, if at all, until the end of the day and that I would keep him infm.

The Col GS tele me at about 1245 B hrs to say that he was preparing a written requirement in connection with this request...*

(W.D., Plans Sec, H.Q. First Cdn Army, August 1944: Appx (not numbered) -- C. of S. to G.O.C. in C., 11 Aug 44)

On 12 August, in the interval between the end of "TOTALIZE" and the mounting of "TRACTABLE", the army/air pairing for First Cdn Army envisaged in the "OVERLORD" plan was at last achieved. Although all its wings were still not in France, Main H.Q. 84 Gp began to work as the associated air headquarters with H.Q. First Cdn Army (W.D., G Air Branch, Main H.Q. First Cdn Army, 12 Aug 44). Arrival of a full air staff resulted in overcrowding of the Joint Operations Room. To overcome this, the RAF Operations Room was joined physically to the Joint Operations Room (W.D., Plans Scc, H.Q. First Cdn Army, August 1944: Appx (not numbered) -- C. of S. to G.O.C. in C., 18 Aug 44). It may be of interest to note that First Cdn Army was the only formation in 21 Army Gp to achieve this physical integration with its associated air force headquarters. The Headquarters or 21 Army Gp and Second Army operated at a distance of some miles from their associated air headquarters. ((H.S.)215Cl.091: "Air Sp N.W. Europe - Maj-Gen Mann", para 8)

Operation "TRACTABLE"

- The air planning for "TRACTABLE", particularly the part of it concerned with heavy bomber support, followed the same general system of high-level conferences as was used for "TOTALIZE". The main features of the major air plan for "TRACTABLE" were settled at a meeting held at H.Q. First Cdn Army at noon on 13 August. Bomber Command was represented by Air Vice-Marshal Walmsley; Gen Crerar presided and Gen Simonds, G.O.C. 2 Cdn Corps, attended, as did A/V/M Brown, A.O.C. 84 Gp. Air Chief Marshal Leigh-Mallory arrived shortly after the conference had ended and reviewed the plan (W.D., G.O.C. in C., First Cdn Army, 13 Aug 44).
- Although the "TOTALIZE" air plan and its execution (including the short bombing) has already been recorded (A.H.Q. Report No. 65, paras 158, 163, 172 to 174), it is necessary to dwell in more detail on one feature of the planning -- the failure to notify Bomber Command of the use of yellow smoke to identify friendly troops.** During the air planning, A/V/M Walmsley had

^{*}Air force reluctance to provide this support appears to have arisen more from doubts as to the tactical advantage to be gained from it than from considerations of the air effort available, or the suitability of the targets for air attack (ibid). This aspect of the incident is discussed further at para 64A below.

^{**}This was, of course, only a comparatively minor contributing factor to the short bombing. The main reason for the inaccuracy was gross error in navigation. ("Report by C. in C. Bomber Comd", pp 5-7)

"particularly sought information on the subject of possibly confusing pyrotechnics and had been assured that none would be used" ((H.S.)215C1.019(D4): file G.O.C. in C. 6-4-1 -- Report [by C. in C. Bomber Comd] on the Bombing of our own Troops during Operation "TRACTABLE" p8). Whoever gave Walmsley this assurance neglected to mention the practice, notified in SHAEF Operational Policy Memorandum No. 19 of 27 Mar 44, of using yellow smoke or flares to identify friendly troops in forward areas (ibid, folio 26, C. of S. to G.O.C. in C., 22 Aug 44). This system was well known throughout the army and the tactical air forces (ibid, Report by C. in C. Bomber Comd, p. 7)

Walmsley, particularly when pyrotechnics were under discussion, is hard to understand. A partial explanation could be found in the fact that it is quite impossible for a representative of so highly specialized a force as Bomber Command to reach any understanding, in a hurried planning conference, of the standard operational procedures used by ground troops and tactical air forces. The normal means of avoiding incidents arising from situations such as this is to exchange liaison officers. This was not done during the planning of "TRACTABLE" nor does such an exchange appear to have been considered necessary in the light of subsequent experience. However, a wireless set was sent from Bomber Command to 2 Cdn Corps during the operations against Boulogne and Calais (para 41 below). This step may have been taken as a result of "TOTALIZE", though no such connection is established in the sources available.

F.C.Ps., V.C.Ps. and Contact Cars

- TOTALIZE" was succeeded by the pursuit through France and Belgium and by the reduction of the garrisons of Boulogne and Calais. These operations did not produce anything new in the planning of air support, but they did lead to innovations in the control of that support -- or at least to wider use of devices introduced earlier. These were the Forward Control Post (F.C.P.), the Visual Control Post (V.C.P.), which was used during "TOTALIZE", and the Contact Car.* ((H.S.)215Cl.079(D 14): "Air Sp" -- Memo "Fwd Aids to Air Sp", 1 Sep 44).
- All three of these devices had as their object the provision of quick air support (in the form of air attacks or information from reconnaissance missions) to ground troops "when operations are such that suitable air targets of a fleeting nature are likely to present themselves" (ibid)
- 37. Both the F.C.P. and the V.C.P. were equipped to direct aircraft on to ground targets. The essential difference between them lay in the scale of air effort which each could handle. The F.C.P. was able to join the forward ASSU net or nets, intercept demands for impromptu support and accept such of them as fell within its terms of reference and the scale of air effort allotted to it. Besides being able to communicate with the aircraft of a cab rank, the F.C.P. could also send

^{*}These devices are discussed more fully at paras 99 to 116 below.

requests for additional aircraft back to the G.C.C. The V.C.P., on the other hand, was not equipped with sufficiently powerful wireless sets to reach the higher air headquarters. It was therefore normally limited to control of a cab rank which was airborne in its vicinity. This difference in capacity was reflected in the allocation of the posts, the F.C.P. being normally deployed with the headquarters of a leading division while the V.C.P. worked with the headquarters of a leading armoured brigade. Physically, the F.C.P. was mounted in two half-tracked vehicles, while the V.C.P. operated in a tank. (ibid)

38. The Contact Car, on the other hand, existed to provide a ground link between a reconnaissance unit and aircraft doing close reconnaissance for it. The idea was to fly shallow coverage across the unit's front, reporting observations to the unit via the Contact Car. Armed with this information, the C.O. could then plan his advance to avoid blown bridges and similar obstacles. Since two-way communication was provided, he could also ask the pilot for information about specific points on his front. (ibid)

Air Support in the Clearing of the Channel Ports

- The heavy bomber support which was provided for the reduction of the German garrisons in the ports of Le Havre, Boulogne and Calais has already been described (Hist Sec, C.M.H.Q., Report No. 184, Canadian Participation in the Operations in North-West Europe 1944. Part V: Clearing the Channel Ports, 3 Sep 44 6 Feb 45, paras 12-20, 56-61, 104-111). A part of the planning -- General Simonds' special plea for heavy bomber support -- has also been recorded (ibid, para 56). Sources now available do not throw much further light on the planning of this support, except to clarify somewhat the reasons for air force opposition to the use of heavy bombers. It was Air Chief Marshal Leigh-Mallory's opinion that this effort would have been more effectively employed in attacking industrial and transportation targets in Germany, thereby preventing the enemy from re-establishing a continuous front ("Info from Air Hist Br, Air Ministry)
- The air force, while convinced of the value of heavy bombing immediately prior to ground attacks, had concluded that its effectiveness in "softening up" strong defences was limited. For this reason, air officers opposed the use of heavy bombers during the preparatory stages of a large operation. They considered attacks on strategic objectives to be a more economical employment of bombers at that time. The army, particularly First Cdn Army, never accepted this point of view, and the fundamental conflict of opinion which resulted was to lead to sharp debate over the use of heavy bombers against Walcheren (paras 58, 59 and 84-190 below).
- The air operations against the channel ports produced an innovation in the control of heavy bombing, when Bomber Comd located a wireless set at H.Q., l Corps for Operation "ASTONIA" (W.D., G Air Branch, Main First Cdn Army, 6 Sep 44). Full details of the communication system thus established are not given in sources at hand, but it would appear that this set provided communication by wireless telegraphy with H.Q. Bomber Comd. On completion of "ASTONIA", the set moved to 2 Cdn Corps for Operations "WELLHIT" and "UNDERGO" (paras 42, 43 below). Liaison officers were not exchanged, although representatives of Bomber Comd made liaison

visits to First Cdn Army. During one of these trips, the SASO of 8 Gp (Pathfinders) watched the heavy bombing of the Boulogne defences on 17 September -- D Day for Operation "WELLHIT". Subsequently, he discussed methods of marking and control with the C. of S. 2 Cdn Corps. During this discussion, he mentioned that Bomber Comd might employ a ground control set* for future operations (ibid, 17 Sep 44). However nothing was done about this, and in the planning for the bombing of Walcheren, the direct link to H.Q. Bomber Comd was taken away from the army and placed with 84 Gp (para 57 below).

- communication foreseen by the SASO of 8 Gp -- may possibly have been connected with an incident which occurred while the Bomber Comd wireless set was at 2 Cdn Corps. On 19 September, during the final stages of the fighting for Boulogne, this formation made a request direct to Bomber Comd for heavy bombing support on a target area west of Calais. This request, of course, disregarded A.E.A.F.'s jealously-guarded right of complete control over the allocation of offensive air support. It also infringed on H.Q. First Cdn Army's prerogatives as senior head-quarters. After a good deal of scurrying to and fro, it was ruled that 2 Cdn Corps would in future lodge all such requests with H.Q. First Cdn Army, the latter headquarters to obtain air force concurrence before any message was sent on the direct link to Bomber Comd. Details of approved attacks could then be settled on the direct link without higher reference (W.D., G.S. Branch, Main H.Q. 2 Cdn Corps. 20 Sep 44; Messages to Bomber Comd in (H.S.)225C2.096(Dl0)).
- A3. Prior to all this, 2 Cdn Corps had received a confirmation from Bomber Comd that the support was forthcoming (the attack was in fact delivered), and had accordingly requested that a strike by medium bombers on the same target be diverted to the Fort de la Crèche area north of Boulogne. This request, coming as it did on the heels of the messages dealing with the improper use of the direct link, caused a good deal of confusion in air force channels. While it would be unwise to generalize too broadly from a single incident, it would nevertheless appear that the whole affair indicated a certain rigidity in the arrangements governing "pre-arranged" air support** at this time. In view of this possibility, a report on the incident made by Colonel Beament to Brigadier Mann is worth recording.

^{*}A set deployed with the formation being supported and netted to a set in the bomber stream. The link thus established could be used for such purposes as passing information about the fall of the bombs (especially if they were short) to whoever in the bomber stream had control of the attack.

^{**}Attacks planned, usually during the evening, for delivery the following day. Distinguished from "impromptu" support which was delivered as soon as possible after the request was received. Discussed further in paras 69 to 71 below.

[On learning of 2 Cdn Corps' direct communication with Bomber Comd]... I immediately discussed the matter with C/C Ops 84 Gp RAF, and infm you. I was present in your caravan when you discussed the matter with C of S 2 Cdn Corps, to whom you pointed out the impropriety of the procedure adopted. On your authority, I reported the matter to BGS Ops 21 Army Gp at 1155 hrs, and he undertook to endeavour to clear the matter with 2 TAF. Meanwhile, G/C Ops 84 Gp RAF had reported the matter to G/C Ops 2 TAF, and at my instance submitted a request to 2 TAF in identical terms to the request of 2 Cdn Corps to Bomber Comd.

At 1310 hrs G/C Ops 84 Gp RAF infm me that 2 TAF reported that AEAF had decided to cancel this hy bomber effort. On the conclusion of lunch at 1350 hrs, I reported this to you and suggested that either you or I should infm C of S 2 Cdn Corps. You decided to do so yourself.

At 1415 hrs I was infm by GSO 1 Air that G/C Ops 84 Gp RAF had told him that AEAF had been unable to communicate with Bomber Comd to effect the cancellation. I reported this to you at once, and in your caravan called G/C Ops 84 Gp RAF personally, to make a final check as to how matters stood. He requested that we arrange for 2 Cdn Corps to send a msg to Bomber Comd on their direct link, requesting confirmation as to whether the attack was on or had been cancelled by AEAF. You passed this by tele to GSO 1 2 Cdn Corps in my presence at 1430 hrs....

At approx 1615 hrs G/C Ops 84 Gp RAF infm GSO 1 Air and myself that 2 Gp RAF 1t bomber effort was going on the FORT DE LA CRECHE target in four waves at 1730, 1735, 1740 and 1745 hrs, and details of target indication were agreed and arranged. At approx 1830 hrs GSO 1 Air infm me that the 2 Gp RAF attack had NOT in fact taken place. On inquiry, G/C Ops 84 Gp RAF confirmed this, and stated that 2 TAF reported that AEAF, in an endeavour to cancel the hy bombing attack, had made a "mistake" and cancelled the 2 Gp RAF attack. I requested him to book 2 Gp RAF for 21 Sep for BOULOGNE area, details to be confirmed later. I then reported the failure of this attack to you at 1855 hrs as soon as you were free. In connection with the above, it should be noted that AEAF only comds 2 Gp RAF through the intermediary fmn 2 TAF, who state that they were NOT consulted in the matter of cancellation of the 2 Gp RAF effort which was done directly by AEAF with 2 Gp RAF....

((H.S.)215C1.(D 251): "Air Sp" Col G.S. to C. of S., 20 Sep 44)

While the higher-level discussion of First Cdn Army's air support in the clearing of the channel ports is reasonably well documented, scant information is

available about developments on a lower plane. Activity on this level includes the planning, prior to a large operation, of support from within the resources of 84 Gp, the processing of day-to-day requests for "pre-arranged" or "impromptu" air support, the work of the air liaison officers and of the air support signals unit. There can be little doubt that August and September saw a progressive increase in the efficiency of these operations, but no great changes were made -- or at least recorded.*

45. "WELLHIT" revealed what could be interpreted as a weakness in target intelligence; of 31 air targets attacked, 18 proved to be empty or dummy positions ((H.S.215A21.013(D4): "21 Army Gp Op Reports" -- Report No. 16, para 2 of Sec II of the Summary of Lessons). This misdirection of the air effort could have resulted from some weakness in the system used for selecting air targets, but no details are available.**

By the end of the first week of October 1944 troops under command of First Cdn Army had completed the encirclement of the Falaise pocket, reduced the garrisons of Le Havre, Boulogne and Calais, pursued the enemy through France and Belgium and closed on the German formations defending the Scheldt estuary. Air had played an important part in all these operations, and significant advances had been made in planning and controlling the use of this powerful arm. The technique of preparing requests for heavy bomber support had been mastered, and some progress had been made in improving communications with Bomber Comd. On the negative side, the beginning of a fundamental difference of opinion as to the best use of this formidable weapon had begun to appear between the army and the air force.

As far as support of the tactical air force is concerned, 2 TAF, with A.E.A.F. superimposed, still remained a rather remote and unpredictable factor. Close relations, however, had been established with 84 Gp. It is true that these relations were not always harmonious, but they had led to the planning and execution of an impressive volume of effective support. Improvements had also been made in the speed and accuracy with which this support could be delivered, both by the introduction of special control devices and by increased efficiency in the staff and technical duties involved.

AIR SUPPORT ON THE SCHELDT, OCTOBER - NOVEMBER 1944

Work on air support at H.Q. First Cdn Army during the last three months of 1944 and the first month of 1945 may be divided into two phases. During the first,

^{*}The Air vehicle at H.Q. First Cdn Army was burned up early on the morning of 19 Sep 44 (W.D., G Air Branch, Main H.Q. First Cdn Army, 19 Sep 44). All operational files were destroyed. This mischance may explain the dearth of written records concerning these aspects of air support.

^{**}The procedure followed in selecting individual targets is dealt with in some detail at paras 95 to 98 below.

activity centred on the provision of air support for clearing the Scheldt estuary and expelling the Germans from the territory below the main stream of the Maas. This had all been accomplished by the end of the first fortnight in November, and the army had settled down to static operations destined to last for almost exactly three months. During this static period, changes which had gradually been made in the machinery for planning and controlling air support were formalized as establishment amendments or published as statements of doctrine. The period was, in effect, one of consolidation of the experience gained during the hectic three months which began with the planning for "TOTALIZE" early in August. The value of the work done at this time was to show in January, during the preparation of air support for "VERTITABLE".

At the outset, it is important to realize that operations along the Scheldt and up to the Maas were, from the "air" point of view, a single continuous effort. Air support, in other words, went on without intermission and to the greatest possible extent, subject only to interruptions caused by bad flying weather. The work of planning this support went on at the same pace. The succession of ground operations -- "SWITCHBACK", "VITALITY", "INFATUATE" and so forth -- were reflected only as changes in air priorities, in the forward formations originating demands for air support, and in the areas to be searched for targets. A complex pattern of widely-varied activities, spread over a very large area, was involved. Fortunately, most of the significant aspects of this effort (except the reasons for some decisions taken at a very high level), were reflected sooner or later in the Joint Battle Room and the Army Ops Room at H.Q. First Cdn Army. These two command centres therefore provide an excellent point of view from which to survey the busy scene of air support during October and the first part of November 1944.

Preliminary Air Operations, Operation "INFATUATE"

- One of the most important and exacting duties performed in these rooms during October was the detailed planning of the air attacks to be made on Walcheren prior to the D Day for Operation "INFATUATE": Before describing the course of this detailed planning, it might be well to review briefly the formulation of the outline air plan on which the work was based.
- During the latter half of September, a series of conferences were held at H.Q. First Cdn Army with the object of working out a plan for the capture of Walcheren. These conferences, and the flooding of the island which resulted from them, have already been recorded in detail (Hist Sec, C.M.H.Q., Report No. 188, Canadian Participation in the Operations in North-West Europe, 1944. Part VI: Canadian Operations, 1 Oct 8 Nov: The Clearing of the Scheldt Estuary, paras 45 to 90, 268). For purposes of this narrative, it is sufficient to summarize them briefly from the point of view of the planning techniques employed.
- The air effort required on Walcheren was from the first a major item on the agenda of the meetings. As the possibility of an immediate combined operation against the island diminished, consideration of preparatory air bombardment came to dominate the conferences. The commanders responsible for the operation, with the advice of the usual representation of supporting arms and services,

stated their requirements for air action and arranged them in an order of priority (ibid). The resulting list constituted the outline air plan.* As far as the planning process is concerned, exactly the same sort of thing had been done in making up the outline plan for the previous large operations -- "TOTALIZE", "TRACTABLE" and so forth.

The next stage in the planning** took place in the Joint Battle Room at H.Q. First Cdn Army, the headquarters responsible for co-ordinating the planning of the air effort. Here, a group functioning unofficially as the "target section" went over the requirements and selected the individual targets involved. One of the requirements, for example, was for attacks on "batteries affecting minesweeping and/or deployment of naval bombardment ships" (Pre-planned Air Sp, Op "INFATUATE", 2 Oct 44, para 1(a)). The "target section" selected four gun positions which fell within this class (ibid, Appx "A", p. 2). We shall have occasion to refer to this sort of work in greater detail later (para 95 to 96 below). At this stage, it is sufficient to note that choice was based on all available intelligence about the German defences on Walcheren, the principal source of information being the reports of No. 1 Army Photographic Interpretation Section (usually called 1 Cdn APIS).

When the targets had been selected, they were passed to the air force staff officers, who divided them into two classes -- those which could not be profitably engaged by 84 Gp and those which could be taken on by the Group's aircraft; the main criterion was the strength of the position in question. Two tables, known as "target schedules", were then prepared. These listed the individual targets chosen for attack under each requirement. The first table concerned targets outside the resources of 84 Gp; the second listed those which fell within the Group's resources (Pre-planned Air Sp, Op "INFATUATE", 2 Oct 44, Appx "A" and "B").

^{*}A statement of this plan is at para 56 below.

^{**}The account of the detailed planning given in this and the succeeding four paragraphs is based on:

⁽a) (H.S.)215C1.093(D3): "Air Sp, First Cdn Army (by Lt Col W.B.G. Reynolds, G.S.O.1 (Air) H.Q. First Cdn Army)", para 13(a); Appx "E", para 4 (Herinafter referred to as Reynolds).

⁽b) (H.S.)215Cl.099(D28): "Establishments" -- Progressive Summary on Provision of Air Target Intelligence and Plans.

⁽c) W.D., G Plans, H.Q. First Cdn Army, October 1944, Appx "AA" to "PP" -- Preplanned Air Sp, Op "INFATUATE", 2 Oct 44 (at folio 90).

The targets in the latter schedule may be disregarded at this point. They were disposed of as "pre-arranged" support according to a system which will be described later (para 69 and 70 below). The targets of the first schedule, however, had to be submitted to higher army and air force headquarters for approval. As we shall see (para 78 below), this chain of command led in one case to the Combined Chiefs of Staff and the British War Cabinet.

The submission was made on 2 October, in the form of a covering letter to which the target schedules were attached. This letter, which was signed jointly by the C. of S., First Cdn Army and the SASO of 84 Gp, was sent out on a very wide distribution, including 21 Army Gp, SHAEF, 2 TAF and Bomber Comd. The priorities of targets outside the resources of 84 Gp (in effect the outline air plan for heavy support) ran as follows:

Targets OUTSIDE Resources of 84 Gp RAF

Priority ONE - Special operations to breach dykes for purpose of flooding WALCHEREN.

Priority TWO - Batteries affecting minesweeping and/or deployment of naval bombardment ships.

Priority THREE - AA batteries limiting operations of 84 Gp RAF.

Priority FOUR - Batteries capable of firing onto SOUTH bank of WEST SCHELDE.

Priority FIVE - Remaining batteries.

(Pre-planned Air Sp, Op *INFATUATE*, 2 Oct 44, para 1 (a))

Attack on the top priority target -- the dykes -- had already been approved (ibid, para 5). Requests for attacks on the other targets listed were to be made "to meet developing operational requirement" (ibid, para 6). Early in the planning, H.Q. First Cdn Army had tried to get a direct wireless link to Bomber Command but this was not allowed. Instead 84 Gp was authorized to keep a set netted to H.Q. Bomber Command ("Info from Air Hist Br, Air Ministry"). This channel of communication was to be used only for messages concerning details of approved attacks (Pre-planned Air Sp, Op 'INFATUATE', 2 Oct 44, para 7). Approval was to be sought through the "normal" channels -- back to SHAEF via 21 Army Gp/2 TAF (ibid, para 6). This arrangement, of course, made it possible for the senior air headquarters along the line to maintain the closest possible control over the use of heavy bombers on Walcheren.

It has been noted that the use of heavy bombers to breach the Walcheren dykes had already been approved when the target schedule was issued. Requests for attacks on other targets on the list, when such attacks could best be made by heavy bombers, * met active opposition

^{*}It is to be noted that decision as to type and scale of attack rested with the air force.

from the upper levels of the air force command ("Info from Air Hist Br, Air Ministry"). This opposition had begun to make itself felt in September, both in respect to the heavy bomber attacks on Boulogne and Calais (paras 39, 40 above) and also to attacks on Walcheren which were made, during the month, at General Montgomery's request. On 27 September, in a letter to the Supreme Commander, Leigh-Mallory stated his reasons for opposing the use of heavy bombers against Walcheren. Experience in Normandy had proved, he contended, that heavy bomber attacks were only valuable if they were followed rapidly by ground assaults. He therefore believed that it would be better for the heavy bombers to go after targets in Germany, and make sustained attacks on the Walcheren defences during the 48 hours before the actual assault (ibid).

General Eisenhower did not accept this advice; at the SHAEF Air Meetings of 3 and 6 October the Deputy Supreme Commander ruled that the Walcheren targets were to have first call on the heavy bomber effort (ibid). On 11, 12, 21 and 23 October, four daylight raids were made against the guns at Flushing and Breskens besides one additional attack on the Westkapelle dykes ((H.S.)215C1.093(D2): "Air Sp First Cdn Army" -- Bomber Comd Daylight Attacks on Walcheren). These attacks were opposed by many senior air officers, on the ground that, since they did not think the bombers could knock the guns out, attacks on targets in Germany would pay better dividends. The army, however, even to the levels of Generals Eisenhower and Marshal, wanted as much direct bomber support as possible, owing to the general exhaustion of the troops and the fact that commitments in the Rhur area made it impossible to assign sufficiently heavy artillery support to the Scheldt operations. By 24 October, the airmen appear to have won the argument, for on that date the Deputy Supreme Commander forbade further attacks by heavy bombers against the Walcheren dykes. ("Info from Air Hist Br, Air Ministry")

Routine Air Support During the Clearing of the Scheldt Estuary

During October, while it was working on the Walcheren targets, the Air section of H.Q. First Cdn Army was at the same time arranging air support for the troops fighting to clear the south bank of the Scheldt and the western approaches to South Beveland. The support was largely provided from within the resources of 84 Gp, and its planning and control illustrate the system which was used to meet the day-to-day requirements of the forward troops for both "pre-arranged" and "impromptu" support. Also illustrated is the friction which complicated the relations of the army and air force staffs, at the senior levels, in arranging this support.

The central feature of the planning system was the Joint Evening Conference, at that time held in the Joint Battle Room at 1730 hours each day. The purpose of this meeting was to plan the air effort for the following day. At the start, the C. of S. and the SASO outlined the current ground and air operations, stating the intentions for the immediate future at the same time. Army and air force intelligence was then discussed in detail. Armed with this information, the conference

proceeded to consider army and air force requirements in terms of the air effort available, and to arrange them in order of priority. These decisions were then sent by Main H.Q. S4 Gp to S4 G.C.C. in the form of a directive. Requirements for support from outside the resources of S4 Gp were also discussed and, when approved by the meeting, submitted to 21 Army Gp and 2 TAF along the parallel channels of communication. (Reynolds, paras 11, 12; (H.S.)215Cl.099(D2): "Operations" -- Agenda for Staff Conference, First Cdn Army/S4 Gp RAF 1800 A hrs, 25 Oct 44; Minutes of Staff Conference, First Cdn Army/S4 Gp RAF, 1830 A hrs, 25 Oct 44 (marked folios 1 and 2 respectively))

- Of harmony between the army and air force staffs. As a result, neither these meetings nor the routine operation of the joint headquarters went as smoothly as they could have. Toward the end of October, this friction increased to the point where it was necessary to hold a "showdown" conference, in an attempt to improve matters. Though subsequent events were to prove that this attempt was largely abortive, it is nevertheless important, since the agenda and minutes of the meeting reveal some of the roots of the trouble. (ibid)
- 63. One of the most important factors affecting decisions made at the Joint Evening Conference was the air effort available. This was determined by the daily directive issued by 2 TAF to 84 Gp. The army staff officers were wholly dependent on the word of the air force as to the terms of this directive, since they did not receive a copy. Even if they had, the situation would not have been appreciably improved, for the directive was frequently altered by verbal arrangement. Thus the text of the directive gave little guidance to its effective terms. In other cases, the directive was received after decisions had been taken. At the conference, Col Beament cited an example of the inconvenience to the army which resulted from this vagueness as to 2 TAF's intentions. On the occasion to which he referred, the Joint Evening Conference had decided that the full resources of 84 Gp were to be available for direct support of First Cdn Army's operations on the following day. This agreement, however, was subsequently nullified by the 2 TAF directive, which assigned two wings to interdiction targets. ("Agenda", para 8; "Minutes" paras 4 and 8)
- directive was the problem of frequent disagreements between the army and air force staffs as to the best employment of the available air support. It is only possible to speculate as to the source of this disagreement, since no minutes of the Joint Evening Conferences are contained in the material at hand. Army sources attribute the friction variously to a clash of personalities at the higher levels, and to a "small brother minority complex" on the part of the air force arising from an imagined threat to the force's autonomy. No statement on the attitude of the air force is available. ((H.S.)215Cl.091:

 "Air Sp N.W. Europe Maj Gen Mann", paras 26 to 38, (H.S.)215Cl.099(Dl4): "Air Sp" -- Reynolds to Oxborrow, l4 Jun 45 (second folio down), para 3)

64A. A statement about the army's attitude on the question is contained in Brigadier Mann's memorandum to General Crerar, written during "TRACTABLE" (para 30 below).

On the proposition that the aircraft and the Air Force org, when working in sp of the Army is, in the final analysis, simply an agent whereby destructive projectiles are delivered into the enemy areas in accordance with the requirements of the Army, in order to replace or supplement the resources of arty, it seems to me to be highly desirable, and indeed essential, that the matter of deciding the suitability or otherwise of the choice of targets and the timing of attack should be clearly recognized as beyond the discretion of the Air Force Comds or Staffs acting in sp, but that the Air Force Comds and Staffs should exercise their discretion based on their experience, trg and knowledge of the weapon in choosing the most appropriate weapon and quantities of that weapon, having regard to the availability aspects, etc, which will give effect, and that as soon as possible, to the Army requirement in the op under consideration.

It is analogous, in my opinion, to a hypothetical case where the CCRA of a Corps, having been told by his Comd, or by the C of S of a Corps, to deliver harassing fire or concs at certain places and certain times which are within the capabilities of the arty:-

- (a) Then queries and argues the necessity of the proposed attacks, and
- (b) Defers taking action whilst awaiting further argument in connection with his own views regarding (a) above, until the opportunity for the attack is either:-
 - (i) Passed, or
 - (ii) So closely limited by time factors that the weather and its vagaries will in all probability make it impossible to deliver the attack any way.

In my opinion, the action of the ground forces is sabotaged, rather than supported, by the present practice of the Tac Gp with whom we have been cooperating, sincerely and in a friendly way, upon the system evolved between themselves and Second Brit Army, who, in the first place during the earlier part of the campaign, were mainly concerned with establishing a brhead rather than taking advantage of the fleeting but golden opportunities which now seem to me to be becoming more frequent.

I consider that this matter is one which needs clarification and that the policy when decided upon, and which seems to be now lacking altogether, should be made clear and explicit to all concerned in order that we may be able to carry the war into the heart of the enemy in a harmonious and efficient manner. At the present time we can have harmony or efficiency, NOT both. Today, for example, in endeavouring to arrange for this one target, in itself a small part of our concern or interests, the Col GS and myself have each devoted not less than two hrs a piece in most frustrating circumstances, towards the accomplishment of what, to me, seems to be a very simple matter if superior authority would define the terms of ref, and the procedure for applying the air weapon to its full capacity in furtherance of the C in C's strategic plans.

I feel it my duty to place this matter before you in this detail, with this as a specific example, even though we are now about to resume our basic link with 84 Gp RAF as a joint Army/Tac Gp HQ, because we shall be up against the same problem, if on a higher plane, namely 2 TAF, when we have occasion, as we shall have, to require sp beyond the resources of 84 Gp RAF. This circumstance is arising now in connection with your instrs of last night for the swing of 2 Cdn Corps pivoting on FALAISE.

Finally, I would like to make it quite clear that there is no question of a lack of harmony or coop or sympathetic reception of our requests insofar as 83 Gp are concerned during our so far successful ops together, but that the matter is one which is in need of clarification, in my view, if we are to operate successfully.

(W.D., Plans Sec, H.Q. First Cdn Army, August 1944: Appx (not numbered) -- C. of S. to G.O.C. in C., 11 Aug 44.)

64B. The analogy drawn in this paper between artillery and air support seems hard to justify, in view of the following important differences:

- (a) Artillery support was not dependent on weather; air support was absolutely dependent on it. This fact made it impossible for commanders, in their planning, to count on air support to the same extent as artillery support.
- (b) Aircraft in flight from base to target were quite different from artillery projectiles in flight from gun to target. Pilot error, to name but a few, or enemy anti-aircraft fire could effect air support to a much greater extent than artillery support.

- (c) Air support was vastly more expensive than artillery support. There was, in consequence, a correspondingly greater need for economy in its use.
- (d) Air support outranged artillery support. In planning air support, therefore, it was necessary to search for the best targets in an area much wider than that normally dealt with by the staff of a headquarters such as H.Q. First Cdn Army.
- (e) The primary task of the tactical air force was, and had to be, the winning of the air battle. As a result, use of this support on ground targets was always conditional on a favourable air situation. Artillery support, though affected by counter-bombardment tasks, was not committed to this sort of work so absolutely as was air support.

Though it is not conclusively documented, another source of disagreement is at least suggested in the material at hand. On 7 Dec 44, the SASO of 84 Gp forwarded 3 Cdn Inf Div's report on "SWITCHBACK" to 2 TAF. In the third paragraph of his covering letter he wrote:

It has... been made clear to the Army that it is an uneconomical misuse of air forces to devote them solely to close support except in an emergency of this kind.

((H.A.)215Cl.099(D16): "Air Ap Reports" -- Main H.Q. 84 Gp to Main H.Q. 2 TAF, 7 Dec 44 (marked folio 10), para 3)

- of close and indirect support implied in this statement differs sharply from that reflected in the agenda prepared by the army for the conference of 25 October ("Agenda", para 5; "Minutes", para 4) and in remarks on indirect support by interdiction written on the conclusion of the campaign in Europe (Reynolds, para 19(b)). Both these latter sources suggest that the army placed a higher value on close support than did the air force. Any such tendency, it may be noted, would be powerfully reinforced by the representations of forward commanders, who are proverbially short of support.
- 67. However that may be, it is a fact that there were frequent disagreements. It also happened, on at least one occasion, that the differences were not actually resolved, though they appeared to be at the time. The result was that the directive issued to G.C.C. did not reflect what the army staff had taken to be the agreed policy. The consequences of such developments do not need to be elaborated. ("Agenda", para 7)
- Negotiations on the parallel channels of communication were plagued by the same lack of firm and complete agreement. This showed particularly in the requests for additional air support which were sent up to 21 Army Gp and to 2 TAF. According to the system,

these should have been made in identical terms. At the conference of 25 October, the C. of S. cited the "INFATUATE" submissions (para 77 below and 56 above) as examples of how requests for additional support should be handled. It seems, however, that differences appeared on occasions in the submissions which were sent back to the higher army and air formations, and a good deal of confusion inevitably ensued. The conference recognized the need for identical submissions being made, preceded on occasions by telephone calls to 2 TAF, to test the senior air headquarters reaction to the proposed request. ("Agenda", para 2; "Minutes", paras 3, 8). However, as the "Oldenburg incident" of mid-April 1945 was to show, this decision did not solve the problem (para 142 below).

Evening Conference appears to have succeeded, in the main, in laying down an air policy for the succeeding day. With this policy as guide, the army staff officers of the Air section collated all the requests for air support which had been received during the day,* and submitted them for approval. The arrangements in existence at this time for obtaining final approval of the targets are not described in the sources available. By the end of the campaign in Europe, the procedure was to pass the demands back to G.C.C. (without further reference to the air force operations staff) for final acceptance by the W/C Plans, who was guided in his decisions by the daily directive. (Reynolds, paras 13(b), 14(b)) However it is certain that, up to "VERITABLE", the individual demands for impromptu support were approved by the air force operations staff at the joint headquarters before being passed to G.C.C. (para 70 below). It may safely be presumed that similar arrangements existed for handling the demands collated each evening. Copies of the next day's programme were also passed to air liaison officers at G.C.C. and Wings, together with whatever briefing material was required.

The support which resulted from this process of assembling demands, getting them approved and passing them to G.C.C. for action was known as pre-arranged support. Modification of the system made it also capable of providing "impromptu" support, in the form of air attacks delivered within a few hours of their being requested. This was done by passing demands for such attacks back to G.C.C. immediately after they had been checked for accuracy, completeness and acceptability by the army, and had been accepted by the air force staff officers in the joint headquarters. (ibid, paras 13(b), 15, 16, (H.S.)215Cl.099(Dl7): "Air Sp - Op 'VERITABLE'" -- G.S.O. 3(Air) to G.S.O. 1(Air), 11 Mar 45, paras 2 to 5)

Several hours were usually required for the delivery of impromptu support under this system. Speedier provision was achieved by decentralizing control of a part of the air effort to an F.C.P. (Reynolds, paras 17, 18) This device has already been described, in connection with the use made of it during the reduction of the channel ports (para 35 to 38 above). At this point, it is only necessary to state that strikes controlled by F.C.P. formed a large part of the air

^{*}Demands came from forward formations and from the "target sections" and other smaff sections at H.Q. First Cdn Army.

operations along the Scheldt (para 73 below). The whole question of decentralized support came up for discussion between November and January; further details about the F.C.P. are included in the summary of this discussion (paras 99 to 116 below).

Such, in broad outline, was the system used to plan and control air support along the Scheldt. In view of the importance of this support, the available sources contain surprisingly few useful references to it. The record at higher formations is largely a laconic statistical table of sorties flown. Lower formations and units do not refer to it frequently or in any great detail. Reports prepared after the operation, however, do pay full tribute to the air arm's contribution.

73. During "SWITCHBACK", 3 Cdn Inf Div was given a total of 1653 sorties from within the resources of 84 Gp, and 498 medium or heavy bomber sorties. When it is noted that 10 of the operation's 27 days were completely unsuitable for flying, the totals became even more impressive. Control of roughly one-third of 84 Gp's sorties was decentralized to the F.C.P. as "impromptu" support. The remainder was delivered under centralized control. If we assume that a portion of this latter support was "impromptu" (the sorties are not divided into "pre-arranged" and "impromptu" categories, but it is fair to assume that both are included), we reach some understanding of the extent to which the forward troops were able to call down air attacks on targets within a short time (on occasion within 10 or 15 minutes) of their being discovered. ((H.S.)215Cl.099(D 16): Air Sp Reports" -- Air Sp, Op "SWITCHBACK", 3 Cdn Inf Div, 20 Nov 44)

74. It has been stressed that the support of any one operation, such as "SWITCHBACK", has to be considered as part of a single continuous effort on the part of the air planners. The full effect of this statement is strikingly shown in the air operations for any one day in October. On the 13th of the month, for example, air action ranged over a front extending from Dunkirk to the approaches to South Beveland, in response to demands for air support from no less than ten formations. 3 Cdn Inf Dir appears to have had top priority, 284 sorties being flown in its support. 134 of these were attacks by four-aircraft cab rank controlled by the F.C.P. against gun areas, strong points, houses, dyke sectors and so forth. 150 sorties were flown as pre-arranged support against casemates, heavy batteries, concentrations of infantry in Schoondijke and similar targets. Twenty-four sorties of pre-arranged support were flown against targets submitted by the Czech brigade in the Dunkirk area. An enemy artillery position located by 2 Cdn Inf Div on the approaches to South Beveland became the target of eight sorties of pre-arranged support. The target section at H.Q. First Cdn Army detected an enemy headquarters, whose habitation (three buildings) was completely destroyed by pre-arranged support in the form of 16 fighter-bomber sorties. On the same day 84 Gp flew 254 additional sorties -- 167 armed reconnaissance, two weather reconnaissance, 30 tactical reconnaissance, 13 photographic reconnaissance and 34 fighter operations.

(W.D., G Air Branch, Main H.Q. First Cdn Army, 13 Oct 44; also Appx "1" -- Summary of Air Sp Demands, 130500 - 140500 Oct 44)

Air Support, Operation "INFATUATE"

75. By the end of October the enemy forces along the Scheldt estuary had been virtually destroyed by ground attacks combined with air operations such as those described above. A few Germans still held out around the western end of the Leopold Canal, and the positions on Walcheren which remained above water were manned; these latter represented the only real threat to free passage of our shipping to Antwerp.

76. The planning of the preliminary bombardment of Walcheren has already been traced (paras 50 to 59 above). While this bombing was still going on (attacks, it will be recalled, were delivered between 11 and 23 October), H.Q. First Cdn Army prepared a submission covering the attacks to be made, immediately prior to the D Day of Operation "INFATUATE", by aircraft heavier than those of 84 Gp.

October, took the same form as the one prepared at the beginning of the month. It consisted of a jointly-signed covering letter to which a target schedule (limited in this case to targets outside the resources of 84 Gp) was attached. The submission requested "that these targets may be appropriately engaged on a programme of bombing to be completed by 312359A Oct 44. Insofar as may be practicable, it would be desirable for this programme to be compressed into the period 290001A to 312359A Oct 44. Appx 21 (W.D., G Plans H.Q. First Cdn Army, October 1944: Appx 21 Pre-planned Air Targets, Op "INFATUATE", 22 Oct 44 (at folios 124 to 131))

77A. The attached target schedule was formed by amending the issue of 2 October to take account of the progress of flooding, the discovery of new targets and the effects of part of the October raids. The results of the raid of 21 October were not available when the new schedule was prepared, and were not reflected in it. Also the raid of 23 October, and additional requirements of the naval and military commanders, made further amendments necessary. These were notified by signal messages which added certain targets (including the port of Flushing) and deleted others assumed to be damaged or flooded (ibid, Appx "20", folios 183 to 186). As amended, the new target schedule listed 26 Valcheren targets on which attacks from cutside the resources of 84 Gp were requested. Though they were not so classified in the schedule, these targets could be grouped into a Westkapelle and a Flushing series. On 27 October, in a letter to 2 TAF, 84 Gp summarized the arguments in favour of providing this support, pointing out the great strength of the positions involved, the extreme vulnerability of the attacking forces, the impossibility of providing

^{*}D Day was 1 Nov 44.

preliminary naval bombardment and the time required for the ground forces to deploy artillery in the Breskens area to engage the Walcheren positions. ((H.S.)692.016(D1): "Op Orders 84 Gp RAF": Air Plan, Op "INFATUATE", 27 Oct 44 (paras 4 to 7))

78. There is no record available of the reaction in the higher levels of command to the request for attacks on the Westkapelle positions. Presumably it did not meet serious opposition, for the air force had from the first been convinced of the value of such attacks immediately prior to an assault (paras 39, 40, 58 above). The proposal to bomb Flushing, however, met strong resistance, based more on humanitarian and political than purely military considerations. ("Info from Air Hist Br, Air Ministry")

78A. The request was considered by SHAEF (Air) on Sunday, 29 October, General Eisenhower attended the meeting, as did Air Marshal Coningham, the commander of 2 TAF. During the discussion Air Chief Marshal Tedder, the Deputy Supreme Commander, asked Air Marshal Coningham why 2 TAF could not deal with the Flushing targets, Coningham replied that the positions in question were too strong, and recommended night attacks by Mosquitoes of 2 Gp. There was a general reluctance to duplicate the havoc wrought in Le Havre by the heavy bombers, and the final decision was for Mosquitoes to attack the town immediately prior to the assault. (ibid)

78B. Air Chief Marshal Harris, the C. in C. Bomber Comd, shared this unwillingness to unleash the heavy bombers on Flushing, and phoned Air Chief Marshal Tedder to this effect on the same day. That evening, Prime Minister Churchill forbade the bombing of Flushing, possibly on Harris's suggestion. Shortly afterward, the British Chiefs of Staff raised the whole question of the necessity of bombing the town with the Supreme Commander. As a result of further study, the bombing of Flushing was dropped from the air plan, and the War Cabinet ruled that the town would only be bombed on instructions from the Combined Chiefs of Staff. (ibid)

78C. Meanwhile, the successful completion of Operation "VITALITY" was believed to have resulted in several thousand German troops being driven into Flushing from South Beveland. Accordingly the Supreme Commander requested the Combined Chiefs of Staff to approve fighter and medium (but not heavy) bomber attacks on the town. Prime Minister Churchill himself approved the submission, adding that every effort should be made to spare the Dutch civilians in the port. (ibid)

79. The delivery of this heavy support began on 28 October and was continued for three successive days. Seven kundred and forty aircraft were involved; approximately 4000 tens of bombs were dropped. The heaviest of the attacks was made on the 29th when 11 targets were attacked, an average of 30 to 35 aircraft being detailed to each target. Bad weather forced cancellation of the attacks proposed for 31 October. On the night 31 Oct/l Nov, presumably in accordance with

Mr. Churchill's decision, 35 Mosquitoes of 2 Gp attacked Flushing. (ibid)

While all this was going on, plans were being made for the use of 84 Gp's aircraft immediately prior to and during the assault. As has been the case throughout this study, the course of this planning is not well recorded in the material at hand. The final decisions, however, are shown in the Air Plan sent out by 84 Gp on 27 October, and in the Operation Order issued by the Group on the following day. ((H.S.692.016 (D 1): "Op Orders 84 Gp RAF" -- Air Plan, Op "INFATUATE", 27 Oct 44; also 84 Gp 0.0. No. 2, Op "INFATUATE", 28 Oct 44)

Sl. In broad outline, the plan envisaged a greater concentration of 84 Gp's effort on the Westkapelle than on the Flushing positions (ibid, Air Plan, paras 13, 14). The attack on Flushing ("INFATUATE I") was to be supported by a preliminary bombardment from outside the resources of 84 Gp* and by artillery in the Breskens area (ibid). The Westkapelle attack ("INFATUATE II") on the other hand, was to receive the following support:

Pre-arranged support.

- (i) H 40 to H 20. Fighter/bombing with instantaneous-fused 500 lbs and 250 lb bombs on enemy defences between targets W.15 and W.154. Object, to kill personnel and keep down the heads of those that remain alive.
- (ii) H 5 to H + 10. "Cab rank" of four squadrons of R.P. Typhoons on call for Fighter Direction Ship for attack on preselected beach defences after L.C.G.(R) rockets have been fired and before assaulting troops get ashore.
- (iii) H + 10 onwards. Continuous fighter cab rank on patrol. At first these air-craft will attack any guns seen by pilots to be firing or any enemy seen by pilots. When A.S.S.U. tentacle opens up on shore and is in touch with F.C.P. the cab rank can be directed on to targets by F.C.P. control.
- (iv) From first light onwards. Remainder of 84 Group fighter and fighter/bomber air-craft not engaged on other First Canadian Army fronts to be available for cover or support as required.
- (v) H 15 to H + 30. Arrangements have been made by H.Q. 2nd T.A.F. for Bostons to lay smoke screens NORTH and SOUTH of the landing to screen the assaulting troops from observation by enemy positions.

 Smoke will also be laid on D+1 day under arrangements made by H.Q. 2nd T.A.F.

(Ibid, Air Plan, para 14, also Appx "B")

^{*}This programme had not yet been cancelled, or at least word of the cancellation had not yet reached lower formations.

- 82. On the day,* bad weather at the bases in Belgium delayed until after 1100 hours the arrival of Typhoons detailed to support the attack on Flushing. This was not such a serious matter, however, since initial resistance to the landing had not been strong, and artillery support from guns deployed in the Breskens area was available to the assulting force. Once they were in the battle, the Typhoons gave excellent support under direction of the F.C.P. at Breskens. ("Info from Air Hist Br, Air Ministry")
- 83. The Westkapelle landings, on the other hand, were more dependent on air support, and elaborate arrangements had been made for postponement at the last possible moment, if the weather should turn out to be completely unfavourable.** In the event, it proved impossible to deliver the pre-arranged fighter/bomber support but the cab rank Typhoons arrived on time and gave an excellent account of themselves. However the heavy bombing attacks, limited in scale and further curtailed by weather, had not destroyed the Westkapelle batteries. The fighter-bomber attacks, which might have neutralized these guns during the initial stages of the operation, had had to be cancelled because of the weather. As a result the supporting naval craft suffered heavy losses. Most of this damage was done by two batteries, situated one on each side of the gap in the dyke. Fortunately, one of the batteries ran out of ammunition early in the operation. Otherwise the assult would have failed. ("Info from Air Hist Br, Air Ministry"); ((H.S.)952.013(D29): Army Op Research Gp Report No. 299: "The Westkapelle Assault on Walcheren", paras 18, 28.7, 29)
- After the operation, Gen Simonds criticized the comparatively light scale of heavy bomber effort, implying that, had a greater tonnage of bombs been dropped, a greater proportion of the hostile guns would have been destroyed ("Info from Air Hist Br, Air Ministry"). While final adjudication of this issue is beyond the scope of this report, one comment appears to be called for.
- The aim of the heavy bomber attacks, which were delivered during the middle part of October, and also during the last four days prior to D Day, was destruction. It does not appear, however, that the planners appreciated the scale of heavy bomber effort required to achieve the destruction of individual strong points. Calculations based on the bomb density achieved during the attacks on the Walcheren batteries indicate that 1400 heavy bomber sorties would have been required to create a 95% probability of destroying one single four-gun battery in concrete casemates. A much larger effort would have been called for by calculations based on the best data available to the "INFATUATE" planners --

^{*}The account of the Flushing and Westkapelle landings is to be read in conjunction with C.M.H.Q. Report No. 188, paras 257 to 305.

^{**}Postponement would, of course, depend as much on naval considerations as on availability of air support. C.M.H.Q. Report No. 138, paras 278 to 281, gives details.

the accuracy achieved against the "NEPTUNE" batteries in June. (Army Op Research Gp Report No. 299, para 29)

- In view of this fact, the survival of hostile guns on Walcheren (particularly the guns of the two batteries which proved most troublesome) would appear to be due less to the air force's unwillingness to throw the whole weight of the strategic air effort against them than to a failure on the part of the planners to assign an absolute, overriding priority to one or perhaps two of the potentially most dangerous batteries. Had the request for support outside the resources of 84 Gp been presented in this form and accepted by the air force, it is entirely possible that the most dangerous batteries would have been destroyed and the casualties measurably reduced.
- 87. It does not appear, however, that any plans were made to concentrate the heavy bomber effort in such a way. The target schedule of 2 October listed 26 targets (para 56 above). It is true that these were arranged in an order of priority, but neither in this document nor later, when the dykes had been breached and the main outlines of the assault plan had been fixed, was the request limited to a very small number of targets such as the two batteries near the gap. These remarks apply also to the request of 22 October (para 77, 77A above). In its initial form, this latter request listed 32 targets; as amended it contained 26. These were tabled in an order of importance, but there is no indication in the available sources that an exclusive priority was given to one or two of them.
- 88. It would seem that the machinery of joint planning failed in this instance. The airmen, keenly aware of the limited destructive power of the heavy bombers, were not sufficiently aware of the importance to the navy and army of the destruction of a limited number of the targets. The navy and army, on the other hand, though acutely conscious of the necessity of destroying the remaining Walcheren batteries, do not appear to have been clear as to how sharply they would have to limit their requests for destruction. Failing a complete meeting of minds on this fundamental problem, the heavy bombardment was scattered over too many targets, and became largely ineffective.
- One other aspect of the heavy bombing requires comment. While the strategic air force had a limited capacity for destroying small isolated targets, it possessed to an important extent the capcity to neutralize them. This characteristic was early recognized by the air force (para 39, 40, 58 above). The army's request that the bombing be compressed into the two days preceding the assault (para 77 above) may well have been inspired by a desire to neutralize the guns which were not destroyed. Both the army and air officers, in other words, seem to have appreciated the importance of the heavy bombers' capacity to neutralize strong defences, but were prevented by weather from exploiting this characteristic of the bomber weapon as fully as possible.
- 90. In sum, it would appear from this analysis that faulty planning and bad fortune combined to limit

the effectiveness of the heavy bombing of Walcheren. Responsibility for the planning failure would seem to belong more to the system as a whole than to the work of any single group. Planning "in close association" militated, in the case of "INFATUATE", against results which might have been achieved by a truly joint staff under a single command.

ORGANIZATIONAL CHANGES AFFECTING AIR SUPPORT, NOVEMBER 1944 - JANUARY 1945

After clearing the Scheldt estuary and fronting up on the Maas, First Cdn Army settled down to static operations which continued from the latter part of November to the first part of February. During these three months air operations in direct support of ground troops were curtailed both by the weather and the reduced scale of activity at the front. 84 Gp continued to range over the depth of the enemy territory in indirect support missions, but had flying conditions and restrictions placed by SHAEF (Air) on the bombing of Dutch centres limited this effort. (W.D. G. Air Branch, Main H.Q. First Cdn Army, November 1944; W.D. G Ops Air, Main H.Q. First Cdn Army, December 1944, January 1945; (H.S.)215Cl.(D 251): "Air Sp" -- Main SHAEF (Air) to Main 2 TAF, 23 Nov 44)

Except for the planning of air support for Operation "VERITABLE", which will be described later, these three months were spent in digesting the experience gained during the period which began with "TOTALIZE" early in August and ended with the successful completion of "INFATUATE" in November. As far as it is revealed in available sources, this process involved an enlargement of the function of the air section at H.Q., First Cdn Army -- reflected in a change of designation -- and in establishment changes designed to provide extra personnel for work, particularly in target intelligence and planning, which had been done previously by improvisation. At the same time, the establishment of 1 Cdn ASSU was amended to provide the vehicles and the army wireless sets and signals personnel required by one F.C.P. and seven Contact Cars. The unit, in effect, became responsible for providing the communications necessary for the decentralized control of the army's air support.

G Ops Air, H.Q. First Cdn Army

93. In December, Gen Montgomery issued an amended version of his pamphlet on air support. The introductory section dealt with fundamental principles. He stressed first the importance of using the air arm's flexibility and range to best advantage by concentrating the whole weight of the available air effort on selected objectives in turn. To do this, he concluded, it was necessary to centralize control of available air power, and exercise command through air force channels. The soldier, in his opinion, could not "expect or wish to

exercise direct command over air striking forces."
(21 Army Gp, Some Notes on the Use of Air Power in Support of Land Operations and Direct Kir Support, Holland, Desember 1944 (Reprinted in Canada May 1946), p. 5, paras 2 and 3)

93A. Turning next to relations between the two services, he stated the two principles which governed their successful co-operation. The first was "the degree of knowledge possessed by each Service of the other's task, their capacity and their limitations"; the second "The degree of mutual trust and honesty of motive which is reached between the two Services". In this connection, he made it clear that the common effort was "a process of negotiation rather than authority". (ibid, pp. 5 and 6, paras 4 and 5)

93B. Of more immediate concern to this narrative is his treatment of the staff duties connected with air support. Dealing with the subject, he wrote:

As further experience is gained and adjustments in our training have had time to bear fruit, the requirement for any section of the operational staff to concentrate exclusively on air matters should diminish, and at certain HQ levels disappear. It is probable however that at certain points, particularly the HQ of an army, the volume of work directly connected with air support will always remain such as to necessitate a section of the operational staff devoting themselves to air matters. These staffs must not be treated in any way as separate sections: an attitude which would tend to confine the responsibility for air matters, and be detrimental in the long run. They should be regarded as an integral part of the General Staff (Operations) and classified accordingly.

(Ibid, para 15)

94. In accordance with this doctrine, the G Air Section at H.Q. First Cdn Army was redesignated G Ops Air. At the same time, its function was enlarged along the following lines:

G Ops Air at this HQ will be a specialized op sec of the GS responsible directly to the Col GS for all aspects of air sp other than tac R, ph R and con R, which will remain the responsibility of G Int. Accordingly the responsibility for dealing with the policy and wider op aspects of air sp will be vested in G Ops Air in addition to the present responsibilities of G Air for detailed implementation of air sp policy and decisions.

((H.S.)215Cl.(D 248): "Org, Tac, Emp of Arms -- Air" --Circular Letter "Reorg of G Ops and G Air", H.Q. First Cdn Amy, 29 Dec 44, para 3) of G Ops Air was amended by the addition of one G.S.O. 2, one G.S.O. 3 and a Staff Learner. The first and last of these additions are not particularly noteworthy, but the creation of the position for an additional G.S.O. 3 is important. This officer was added to the establishment as the head of a small group which was to be employed exclusively on air target intelligence and plans.*

96. One aspect of this work has already been described. We have seen how, in planning major operations, general requirements stated by commanders (the outline air plan) were translated into lists of specific targets for attack (the detailed air plan). The target section was able to do this because it had, as one of its most important duties, the collation of every sort of information which might reveal the existence of an air target in the enemy-held territory opposite the army's front. Thus informed, the target section was able to select the individual targets which fell within the terms of the general requirements given for the operation being planned. The section could also have functioned, via the GSO 1 Air, the Col G.S. or even the C. of S., as an unofficial adviser to the planning conferences. Available sources do not confirm this supposition, but the detailed information held by the target section would certainly place it in a good position to suggest requirements.

Besides selecting targets during the preparation of detailed air plans, when it worked within the terms of general requirements, the target section also selected targets "on its own". Enemy headquarters, for example, were located through intelligence sources and submitted to the air force as targets for attack. One such effort has already been recorded (para 74 above); to it could be added the destruction of H.Q. 15 German Army in Dordrecht. These targets were referred to as "Cloak and Dagger" targets, and frequent mention is made of them in the air section's diaries for November and December. (Saunders, op cit, pp 201, 202; W.D. G Air Branch, Main H.Q. First Cdn Army, 24 Oct 44)

The provision of briefing material was also a responsibility of the target section. This included large-scale maps, mosaics and defence overprints. For special air operations, large-scale stereoscopic pairs of photographs of the targets, annotated with target detail, were provided, along with traces showing hostile anti-aircraft fire, phases of the ground plan and so forth. On occasions, darge-scale models, town plans and oblique photographs were also furnished. In all this work, and in the collection of intelligence, the target section worked closely with 1 Cdn APIS. Preparations on this elaborate scale were primarily aimed at convincing the air force of the merits of army targets. They

^{*}Unless otherwise stated, this and the succeeding three paragraphs are based on:

⁽a) Reynolds, Appx "E".

⁽b) (H.S.)215Cl.099(D 28): "Ests" -- all folios.

also served, of course, to increase the accuracy of the attacks delivered.

Establishment Changes, 1 Cdn ASSU

99. With effect 10 Jan 45, the establishment of 1 Cdn ASSU was amended to provide the vehicles and the army wireless sets and signals personnel required by one F.C.P. and seven Contact Cars (C.M.H.Q. Admin Order No. 19, 16 Feb 45). This step was an important development in the evolution of the machinery for providing impromptu air support under decentralized control.

100. The importance of being able to provide impromptu support appears to have been recognized early (at least as early as June 1943) in the study of air support for operations in Europe. ((H.S.)215C1.093(D 2): "Air Sp First Cdn Army" -- Address by A/V/M Dickson, 7 Jun 43, p. 3) Experience in Africa provided little assistance, since the greater part of the support provided by the Desert Air Force in that theatre had been of the pre-arranged type (ibid). When it commenced operations in Italy, however, this air force began to provide impromptu support, using "rover" tentacles for the purpose. ((H.S.)212C1.4009(D 27): "Notes and Reports Middle East and Far East" -- Report "The Use of Air Sp in the Eigth Army", paras 36 to 41) It is to be supposed that these developments; which were in full course by the latter part of 1943, were noted in England and parallelled by experiments there. Available sources, however, contain little information on any such activity, perhaps because it was confined to the tactical air force and the few army officers who specialized in air support.

101. The circumstances surrounding the first use of such devices in Europe are likewise obscure. One historian tells the story as follows:

'In 83 Group', said Broadhurst,* 'we had made all preparations for the breakout and had installed the system of "contact cars" -- a development of the "cab rank" system... These cars were armoured and designed to push forward with the most advanced elements of the advancing troops. The reason why I instituted them was because I realised that it would be impossible by means of any ordinary reporting system to keep in close, constant, and accurate touch with troops advancing at speed. I determined, therefore, that the contact car should advance with the leading armoured screen with orders to report the position of our own army at any moment and to control the tactical reconnaissance aircraft operating the battle area. This meant that air support could be called up immediately if anything stood in the way of the army. More than that, the army commander would

^{*}A.O.C. 83 Gp.

be able to known exactly where his troops were as messages from the contact car could be passed via the aircraft above to H.Q.

(Saunders, pp 135, 136)

- It would appear that these means of control were initially more intimately associated with the air force than with the army, for it was not until the first of September that an army instruction was issued dealing with them.* This instruction has already been summarized (paras 35 to 38 above).
- 103. On 14 Aug 44, two weeks prior to the issue of this instruction, 410 Air Liaison Section, in conjunction with 84 G.C.C., had fitted out one tank as a V.C.P. On 2 September a successful ground-to-air test was carried out; two weeks later 1st Air Control Section was established as a unit of the Canadian Armoured Corps. It was to operate under control of 410 Air Liaison Section and be attached to 84 G.C.C. for the purpose of acting as a V.C.P. with the latter unit. (W.D., 1 Cdn Air Control Sec, 16 Sep 44 -- 31 Oct 44)
- of changes in wireless sets, the unit -- or a detachment -- had arrived at H.Q. 2 Cdn Inf Div. Its role was to function as an F.C.P. with the divisional headquarters during "VITALITY". On 24 October it was joined by an Air Controller, Capt Ottar Malm of the Royal Norwegian Air Force, and successfully controlled attacks on three targets. The F.C.P. had its biggest day on 27 October, when it directed 42 sorties. Two days later the Air Controller was ordered back to the G.C.C. (ibid). The F.C.P. followed him on 1 November (ibid, 1 Nov 44).
- As we have seen, what must be presumed to be another F.C.P. whose origin is not shown in the material at hand, was at the same time rendering yeoman service in support of 3 Cdn Inf Div south of the Scheldt (para 73 above). This F.C.P. -- or a third -- then located itself at Breskens to control part of the support for "INFATUATE" (para 82 above). No useful description is available of the operation of a V.C.P. or a Contact Car between "TOTALIZE" and "INFATUATE", other than the reference of Broadhurst given above.
- at Main H.Q. 21 Army Gp. The purpose was to discuss amending the establishment of the air support signals units to provide the communication facilities required by F.C.Ps. and Contact Cars. Subsequently, it was decided to fit one command tank per armoured brigade with the same types of sets as were to be used in Contact Cars. Before recording these discussions in more detail, it is necessary to describe the function of the air support signals unit and of the F.C.P., V.C.P. and Contact Car more fully than has been done (paras 11, 35 to 38 above). ((H.S.)215Cl.099(D 26): "1 Cdn ASSU" -- Conference on Est of ASSU, Main H.Q. 21 Army Gp, 9 Nov 44; also 21 Army Gp circular letter "Eqpt, Contact Cars and Tks", 25 Dec 44)

^{*}The first instruction, that is, which is contained in available records.

107. The air support signals unit maintained tentacles with the forward brigades, each tentacle including one officer. The tentacles were in wireless communication with a control which was situated near the air section of H.Q. First Cdn Army and in communication with it. Rear links at G.C.C. and Wings linked this control with the air force organization. Requests for air support from the forward brigades went back directly to the ASSU control, and from it to the air section at army headquarters. En route, they were intercepted by the sets of tentacles at division and corps; this arrangement permitted the latter formations to keep in touch with demands made by their subordinate formations, and at the same time to exercise control over demands when necessary. Requests for both pre-arranged and impromptu air support under centralized control could be made over normal command channels as well as over the ASSU nets. Demands passed much more quickly over the latter system, since it specialized in traffic concerning air support. When control had been decentralized to an F.C.P. and speedy impromptu support was desired, the demands had to be passed over the ASSU net so that the F.C.P. could intercept them. ((H.S.)215Cl.093(D 2):

"Air Sp, First Cdn Army" -- Org and Emp, 1 Cdn ASSU; (H.S.)215Cl.099(D 26) -- Draft Second Army paper

"F.C.P., Contact Cars and Tks" (undated) and covering letter from 21 Army Gp, also comments on paper by G.S.O. 1 Air H.Q. First Cdn Army)

The previous discussion of the F.C.P., V.C.P. and Contact Car centred on their communication facilities. All three, it will be recalled, were equipped to communicate with aircraft in the air. The F.C.P., in addition, was able to order up aircraft direct from G.C.C. Essentially, the three devices existed to provide the communication facilities required for decentralized control of air support.

This control was exercised by a team which, in the case of the F.C.P. and V.C.P., consisted of an air force officer (called an Air Controller) and an air liaison officer. Experienced tactical reconnaissance pilots were used in Contact Cars, with a regimental officer from the unit being supported. The teams in the F.C.Ps. discussed each target submitted and agreed mutually as to whether or not it was suitable for action by the F.C.P. This work appears to have gone on smoothly, without the friction which characterized similar activity at high levels. (Draft Second Army Paper "F.C.P., Contact Cars and Tks"; Reynolds, Appx "H"; "Fwd Aids to Air Sp")

The summary of the exploits of 1 Cdn Air Control Sec has already noted how the communication facilities required by an F.C.P. were more or less improvised. Such as they were, they existed close to but separate from the communication facilities of 1 Cdn ASSU. By November it had become apparent that it would be desirable to replace these separate organizations, both specializing in communications connected with air support, with a single organization. The proposal to enlarge the establishments of the air support signals units of First Cdn Army and Second Army was the natural result.

Dealing with the F.C.P., the conference at 21 Army Gp decided that the post required two sets capable of working on the ASSU nets, a third set for communication with G.C.C./Army H.Q. and a fourth -- a

very high frequency set -- for talking to aircraft in the air. An additional set was to be provided for communication with an air observation post, or with the air liaison officer if he had to leave the F.C.P. for duties with other formations. Five lorries, three jeeps and a one-ton trailer were considered necessary for each F.C.P. The very high frequency set and a reserve set, together with operators, were to be provided by the air force. The new section was to be commanded by a captain, who was responsible for its function as a signals section. Its function in control of air support was the responsibility of the control team detailed to it. ("21 Army Gp Conference on ASSU Est", paras 2 - 9)

112. The conference further proposed to provide seven Contact Cars per army. Five of these were to be obtained by converting existing ASSU tentacles, principally by the addition of very high frequency sets (provided by the air force) for communication with aircraft. The remaining two cars were to be added to the ASSU establishment. No mention was made of the V.C.P., but there was some discussion of fitting out command tanks in the same manner as Contact Cars. Subsequently, 21 Army Gp issued a paper which stated that one command tank per armoured brigade would be fitted with one set for communication on the command net of the formation being supported, another for working on one of the forward ASSU nets and a third, to be installed by the air force only when use of the vehicle was in prospect, for communication with aircraft in the air. (ibid, paras 10 - 16; 21 Army Gp circular letter "Eqpt, Contact Cars and Tks", paras 1(b) to 3)

As a result of submissions prepared along these lines, 1 Cdn Air Control Sec was disbanded and the establishment of 1 Cdn ASSU was increased early in January 1945. (para 99 above; C.M.H.Q. Admin Order No. 19, dated 16 Feb 45, effective 1 Jan 45)

Il4. A reasonably clear idea of the "new"

F.C.P. may be gained from this information. In essentials, the device does not appear to have varied greatly between 1 September when the first description was issued and the middle of January when its equipment was added to the ASSU establishment. Many refinements had no doubt been made in the technical details of its operation during this period. These, however, are not clearly reflected in available sources. In any event, they lie outside the scope of a study such as this.

115. The modification of the ASSU tentacles was to prove the most significant of the changes made at this time.* Each of the modified tentacles was able

^{*}In present (1955) practice, the F.C.P. has been discarded. The modified ASSU tentacle is still retained. It provides a base for the operations of an Air Contact Team (an air force officer and an army officer) which is detailed according to the requirement of the operation in hand. Normally, forward brigades have a tentacle attached. When appropriate, an A.C.T. is also attached to direct close air support.

to maintain communication with aircraft in the air and with the command net of the formation being supported, in addition to its normal communication, via ASSU control, with the air section at army headquarters. In January 1944 the sets required for this performance were housed in what were called Contact Cars -- light armoured trucks. Similar sets were mounted in -- or earmarked for mounting in -- one command tank per armoured brigade. In sum, the new tentacle was provided with all the sets necessary to request air support and brief aircraft in the air. In addition, the mounting of these sets in armoured trucks and in tanks made it possible to adjust the vehicle used to the operation in hand.

116. As yet, there was no general agreement on the function of these new devices. Second Army regarded the Contact Tank as the successor to the old V.C.P. and considered the Contact Car a means of controlling reconnaissance sorties only. First Cdn Army, on the other hand, regarded both as equally capable of controlling air strikes and reconnaissance sorties. A common doctrine could only be evolved through further experience. (Draft Second Army Paper "F.C.P., Contact Cars and Tks"; also comments by G.S.O. 1 Air H.Q. First Cdn Army)

During January, planning for the air support of Operation "VERITABLE" began. Before considering this work, it might be well to survey briefly the machinery for planning and controlling air support which had come into existence by that time.

In the case of large operations such as "TOTALIZE" and "INFATUATE", the first stage in the planning was the formulation of the outline air plan. This was done in a conference or a series of conferences, at which the requirements for air support were stated in general terms. The specific targets represented by these general requirements were then selected and divided into two classes — those outside and those within the resources of the associated air force tactical group. The former targets were submitted to higher command for approval; this stage of the planning was completed by sending a schedule of approved targets, together with the necessary briefing material, to the air liaison officers concerned. Attacks on targets lying within the resources of the associated group, and other tasks such as reconnaissance, impromptu support under F.C.P. control and so forth, were arranged by the army and air force staff officers at army/group level.

119. When the battle was joined, there was a requirement for providing day-to-day air support to the troops involved. This support was either pre-arranged or impromptu. The former was provided by collating all the demands which had come back during the day and submitting them to the associated tactical group. Demands for support outside the resources of the associated group had to be approved at a higher level. Impromptu support was provided under centralized control by the simple expedient of passing demands to G.C.C. immediately after they had been checked by the army and accepted by the air force. Speedier impromptu support was obtained by decentralizing control of a portion of the avilable air effort to an F.C.P. This

section intercepted demands going back on the ASSU net and accepted suitable targets without reference to higher authority. The Contact Car and the Contact Tank existed to control air support (both in the form of strikes and reconnaissance sorties) during "fluid" operations, when control had to be intimately associated with the troops being supported. However the doctrine governing the employment of these devices was not yet firm.

THE FINAL STAGES (JANUARY - MAY 1945)

During February and the early part of March, First Cdn Army drove the Germans out of the western Rhineland. On 1 April its engineers completed a bridge over the Rhine at Emmerich. Thereafter the Canadians, reinforced by 1 Cdn Corps from Italy, liberated northeastern Holland. By 4 May the army was deployed south of Wilhelmshaven, in north-western Germany. Hostilities ended a few days later.

These operations, lasting slightly over two months, produced no major changes in the methods used for planning air support. In the field of control, they led to the "breaking in" of the new F.C.P., and to further definition of the role of the Contact Car and the Contact Tank.

Air Planning, Operation "VERITABLE"

122. In common with the other operations of the period, "VERITABLE" did not lead to any important changes in air support. The expected break-through did not materialize; as a result, the Contact Cars and Tanks did not come fully into their own. In spite of this, the operation is important to this study, if only for the fact that it is the best-documented, from the point of view of air support, of all the Canadian operations in North-West Europe.

The outline air plan for the operation was evolved during a series of conferences, the first of which was held at Main H.Q. 21 Army Gp on 13 Dec 44. Air support was only one of the subjects discussed at this conference. It was stated at this time that First Cdn Army would route demands for air support through 84 Gp, who would have 2 Gp "tied in direct". A representative of Bomber Comd would be made available to the Group for advice during the planning. 2 TAF was to clear enemy aircraft from the skies over the proposed battlefield. ((H.S.)215Cl.099(D 17): "Air Sp -- 'VERITABLE'" -- Notes on Conference held at 21 Army Gp 13 1115 A Dec 44, para 6)

124. Four days later, a conference which dealt exclusively with air support was held at Main H.Q. First Cdn Army. This meeting produced an impressive list of general requirements. Prior to D minus 2, road and rail interdiction was to be carried out, coupled with attacks on ammunition and petrol dumps. Accommodation used by

the enemy well in rear of the then-existing forward defended localities was also to be destroyed. Located enemy headquarters were to be attacked on D minus 2. D minus 1 and the night D minus 1/D Day were to be devoted to further interdiction, the net being drawn tighter during this period. On D Day and afterward, headquarters, telephone communications, gun areas and routes used by the enemy for moving reinforcements were to be attacked. The Germans, in short, were to be denied command, support and tactical mobility to the greatest extent possible during the battle. (ibid -- Minutes of a Conference held at Main H.Q. First Cdn Army 171630 A Dec 44)

125. On completion of this conference, the Intelligence and Air staff sections began the truly herculean task of working out the detail. Intelligence had to secure the necessary information and interpret it in relation to "VERITABLE". G Ops Air had to arrange for maps, air photos, engineer surveys leading to the selection of interdiction points on roads and railways, and interpretation by 1 Cdn APIS of air photographs of the area of the coming battle. Finally detailed target schedules had to be compiled (ibid -- Air/O/1 - 2 (VERITABLE), dated 15 Mar 45, para 3)

The German Ardennes offensive, which began on 16 December, caused the D Day for "VERITABLE" to be set back, and gave what must have been a welcome postponement of dealine for completion of this work. On 9 Jan 45 the G.S.O. 3 Ops Air in charge of the Target Section reported to the Col G.S. on progress (ibid -- G.S.O. 3 Ops Air to Col G.S., 9 Jun 45). His report, too long to be considered here, shows the magnitude of the task in hand. One is tempted to speculate on the extent to which the undoubted advantages conferred by this elaborate preparation were counterbalanced by the time which it consumed. It is certain that preparations on this scale could not have had a place in the German system of committing corps or even armies on a few weeks notice.

Be that as it may, the work of selecting targets forged ahead. When discussion of "VERITABLE" was resumed in January, the new requirements were quickly converted into targets and added to the impressive list already accumulated. This was, in part, made possible by the fact that the new conferences did not make many important changes in the general requirements stated previously. (ibid -- Air/O/1 - 2 (VERITABLE), 15 Mar 45, para 4)

The last general conference, held on 24 January, was attended by senior staff officers of H.Q. First Cdn Army and 30 Corps. together with Air and Intelligence staff officers. The air force was represented by the SASO, the W/C Ops and the W/C Armt of 84 Gp. Brigadier C.C. Oxborrow, B.G.S. Ops Air 21 Army Gp, also attended. ((H.S.)215C1.98(D 369): "Op 'VERITABLE' -- Air" -- Minutes of Staff Conference held at Main H.Q. First Cdn Army 241000 A Jan 45, and att target schedules dated 25 Jan 45)

In general, this conference confirmed the previous decisions. The requirements* for air attacks prior to D Day included road and rail-interdiction, both road and rail bridges over the Rhine at Wesel being given top priority. At the same time one previous interdiction target (the Rhine ferry crossing in the sector Orsoy-Millingen) was deferred and two (blocking the roads into Emmerich and cutting the north-south roads at Xanten, Udem and Calcar) were cancelled. Interdiction of the roads leading into Arnhem and of the north-south and east-west railway lines were retained, along with the requirement for the complete destruction of Cleve, Goch and Emmerich. The original proposal to bomb enemy accommodation prior to D minus 2 was dropped, though such attacks were recommended for the night D minus 1/D Day. It had been found during the preparation of targets that the constant movement of German troops made it impossible to select targets of this type until shortly before the operation was to begin. Military headquarters were dropped from the programme of preliminary attacks for the same reason. Dumps were given a lower priority, owing to the limited effectiveness of air attacks on them; the Xanten dumps were placed first in this category of target. (ibid)

- 130. Dealing with the programme for D Day and afterward, the conference made some changes. The requirements of the G.O.C. 30 Corps were stated in order of priority as: attacks on the Nutterden and Materborn features (the key enemy positions), the isolation of the battlefield and the silencing of the enemy guns. These were included as requirements, though only the first appeared as targets. Isolation of the battlefield was to be accomplished by armed reconnaissance during daylight and intruder aircraft by night. Enemy guns were to be dealt with by F.C.P.-controlled attacks from cab rank. Further, the artillery counter-bombardment programme was to be assisted by continuous artillery reconnaissance. The proposed attacks on headquarters and telephone exchanges were retained, but the requirement was less positively stated. There had been difficulty in locating these targets accurately. Finally, the cutting of routes used by enemy reserves was considered, and several changes were made in the detailed targets selected under this requirement. These changes resulted from a new appreciation as to the most probable direction of movement of the German reserves. (ibid)
- 131. Passing to the subject of day-to-day support, the conference was briefed on the new F.C.P., Contact Cars and Tanks. The Mobile Radar Control Post (M.R.C.P.), a device to control bombers by radar in bad weather, was also described. Most of this discussion dealt with technical points beyond the scope of this study. However it should be recorded that the Contact Cars and Tanks were clearly regarded as interchangeable; any division using its Contact Tank was to man the vehicle from the crew of its Contact Car. (ibid)
- 132. The remainder of the planning may be passed over quickly. Existing target lists were amended to conform to the new decisions, and the resulting targets were divided into the familiar categories of

^{*}To be read in conjunction with the map facing p. 254 of The Canadian Army 1939 - 1945.

outside and within the resources of 84 Gp (ibid -- att Target Lists of 25 Jan 45). On 29 January A/V/M Hudleston, A.O.C. 84 Gp, submitted the former list to 2 TAF for approval, stressing the importance of the Nutterden and Materborn features ((H.S.)215Cl.099(D 17): Main H.Q. 84 Gp to Main H.Q. 2 TAF, 29 Jan 45). Approval or rejection was apparently notified by telephone; a memorandum recording one telephone conversation is available (ibid - Memo on telephone conversation G/C Ops 2 TAF - G/C Ops 84 Gp, 1815 hrs 4 Feb 45. Briefing materials prepared on a lavish scale were distributed, and on 6 Feb 45 the Air Plan for "VERITABLE" was issued as a document signed jointly by the C. of S. First Cdn Army and the SASO 84 Gp. To it was attached the two normal target schedules. Except for a few last-minute amendments, the air planning of "VERITABLE" was completed. ((H.S.)215Cl.98(D 369): Air Plan First Cdn Army/84 Gp, Op "VERITABLE", 6 Feb 45)

While this plan was taking form, the air force was busily detailing forces to the tasks proposed. This process went on concurrently with the final stages of the planning. As targets were worked out, they were assigned to the appropriate air formation. The target list attached to the final plan of 6 February, in consequence, stated firm or conditional decisions as to the air formation which was to attack each target. (ibid) The air forces involved in support of "VERITABLE" included the whole of 84, 83 and 2 Gps. In addition, calls on Bomber Comd and on the U.S. VIIIth and IXth Air Forces had been approved. ((H.S.)215C1.099(D 34): "Op 'VERITABLE'" -- Report by A.O.C. 84 Gp, 15 Apr 45, Pt I, para 4)

134. It is possible, through the daily summary of air support results, to trace the majority of the attacks delivered in execution of this elaborate plan. Limitations of space, however, force this study to record only the attacks on the major targets.* On 1 February heavy bombers of the U.S. VIIIth Air Force attacked the road and rail bridges at Wesel. Three hundred and fifteen (short) tons of high explosive were dropped around the road bridge, and 66 tons around the railway bridge. The latter, unfortunately, remained undamaged. Further attacks proposed for 8 and 9 February were cancelled because of bad weather. On 10 February, 64 Flying Fortresses attacked the bridges again, and were again unsuccessful. One span of the road bridge was hit on 14 February. Attacks delivered on the railway bridge seven days later appeared to have cut the southern approach. On 10 March, a more predictable agency of destruction came into operation, when the retreating Germans demolished both bridges. Meanwhile, on the night 7/8 February, 769 Bomber Comd aircraft attacked Goch and Cleve with good results.

^{*}This record is based on:

⁽a) Report by A.O.C. 84 Gp, 15 Apr 45, Pt III, Appx "D" and "F"

⁽b) Info from Air Hist Br, Air Ministry.

⁽c) W.D. G Ops Air, Main H.Q. First Cdn Army, February 1945: Text and Appx "2" (Preplanned Air Targets and Results); ibid, March 1945: Text from 1-10 Mar 45 and Appd "2" (Pre-planned Air Targets and Results) - first ten summaries.

135. On D Day, bad weather hampered the attacks on the Nutterden and Matterborn features. The attack on the latter was delivered much earlier than had been planned, in an effort to take advantage of a period of good visibility. Unfortunately, this gave the enemy a chance to recover before the ground attack went in. The attacks on headquarters, telephone exchanges and routes used for the movement of reserves had mixed results. The main exchange at Terborg, north of Emmerich, was attacked by 83 Gp. Although extensive damage was done, the exchange was able to carry on. The same attack killed Gen Windig, the artillery commander of 1 Para Army, whose headquarters was close by. Low clouds frustrated the attacks on the Arnhem exchange. Bombs were dropped in target areas chosen as suitable for preventing the movement of reserves, but the effect of this part of the programme on the enemy cannot be determined from Canadian and British sources.

As the operation went on, impromptu support controlled by the F.C.P. was used, though not so extensively as in "SWITCHBACK". Nineteen of the 31 days taken to clear the Rhineland were unsuitable for close support of this type. During the remaining 12 days, 469 sorties were flown under F.C.P. control. Targets as close as 250 yards to our own troops were engaged, and one attack was delivered on an enemy counterattack seven minutes after the request was made.

Though never used in their primary role (i.e. in support of a break-through) both Contact Cars and Tanks were employed to arrange, listen to and pass on the results of tactical reconnaissance sorties. They were also used to control air strikes handed over to them by the F.C.P. when the latter was overloaded.

138. Operation "BLOCKBUSTER", the final phase of "VERITABLE", began on 26 February. Bad weather, coupled with a restriction placed on the use of fighter-bombers as a result of aircraft casualties, curtailed the close support given this operation. The ground troops, however, pushed doggedly forward, and by 10 March had driven the last of the Germans across the Rhine. "VERITABLE" had ended.

In terms of sorties, the operation had received strong support. Over eleven thousand sorties were flown. Of these, 84 Gp provided 7297. 2 Gp and Bomber Comd were next with 1292 and 1021 respectively. U.S. air forces flew 641 sorties, and approximately 900 intruder missions were despatched. Bad weather and intense German anti-aircraft fire somewhat limited the air support by comparison with what had been planned, but it was none the less a significant factor in the ultimate success of the operation.

Air Support from the Rhine Crossing to V.E. Day

140. It has been noted that the final operations in Holland and Germany produced no important changes in the air planning machinery. It would seem that there

was some discussion of the devices used for control. The G.S.O. 1 Ops Air at H.Q. First Cdn Army is recorded as "battling with 84 Gp re merits of F.C.P." (W.D., G Ops Air, Main H.Q. First Cdn Army, 8 Apr 45). Unfortunately the course of this "battle" is not recorded in the material at hand. It could be that the discussion arose from an expression of air force doubts as to the value of the F.C.P. -- doubts which were at least partly responsible for the abandonment of the device in the post-war system (footnote to para 115 above).

It is to be expected that the rapid advances made during this phase of the campaign would have led to good use of the Contact Cars and Tanks. Such, in fact, was the case; the resulting experience confirmed the previous identification of the two devices. As 4 Cdn Armd Div moved into Western Germany on the axis Meppen - Sogel - Friesoythe - Bad Zwischenahn,* its Contact Tank came forward and directed most effective air support for 4 Cdn Armd Bde. Brigadier R.W. Moncel, commander of the brigade at the time, has written a lively account of these operations.

Shortly after the 9th April, 1945, such a man arrived at Brigade Headquarters. Some months prior to this we had been ordered to send one of our Command Tanks back to Army to have it fitted with VHF wireless equipment for use as a Contact Tank. We had duly despatched the machine, fully expecting never to see it again. But on this spring morning the faithful machine reappeared bearing with it a strangely assorted crew. The tank was commanded by an RAF pilot officer who felt very much out of his element and appeared to be decidedly unhappy. He announced that he was "Longbow Nan", for such was his call sign and needless to say that became his name for all time.

The arrival of Longbow opened new fighting horizons for the brigade - we had a new weapon, one that could move at a tremendous speed, could observe the enemy, could be directed, and could strike with devastating effect. It did not take long for the old fear of the Tiffies [Typhoons] to disappear and by the time we had captured Freisoythe [sic], Longbow's fame had spread throughout the entire organization. During this battle, Longbow was operating from Brigade Headquarters directing aircraft on pre-arranged targets - it was difficult country and the condition of the ground made deployment impossible - tanks were limited to the main roads. Energetic patrolling under cover of darkness and smoke had uncovered most of the enemy strong points and, with the coming of light, it was an easy matter to direct the aircraft onto known targets.

Once over the Kusten Canal, opposition was again heavy and the enemy was greatly assisted

^{*}To be read in conjunction with the map facing p.272 of The Canadian Army 1939-45

by the bad state of the ground - tank movement was again limited to roads and these were all adequately covered by fire.

By this time Longbow was firmly established as a part of the Brigade and during the fight up the road toward Bad Zwischenham [sic] he was employed at what we thought was his ultimate role. The contact tank was placed under command of the Lake Superior Regt Mot and was employed with the leading company.

Here Longbow was really in his element and towards the end of the first day was bringing his rocket carrying fighters within one hundred yards of our own troops - no house, no bush, no possible hiding place escaped his attention. His method was as follows:The forward troops would report opposition from a certain location, Longbow would have a look at it, call up his airplanes and brief the flight leader over the air -- where necessary, the ground troops would fire smoke onto the target to assist the pilot. Once the flight leader was sure of the position, he would take a "dry run" at it - if this appeared satisfactory to Longbow and to the company commander; the flight leader would return upstairs, brief his flight and down they would come - there was no anti-tank gun fire that day.

Unfortunately all good things must come to an and - Longbow was recalled - we never really found out the official reason. Some said it was because we were employing him too far forward, others that we were misemploying the aircraft - it might have been because Longbow had developed the habit of calling any aircraft he could see and inviting them to join the fight. Whatever the reason was, his removal was a great loss and, with his departure, we settled down to the slow plodding fighting which characterized the operations of armoured devisions in that part of the world.

((H.S.)245C4.083(D4): "Contact Tk -- Notes by Brig R.W. Moncel")

142. It has been noted that relations between the senior officers of H.Q. 84 Gp and H.Q. First Cdn Army were not so harmonious as they could have been. This condition, unfortunately, persisted throughout the campaign. The closing days, in fact, produced a rather jarring incident, precipitated by a request of 2 Cdn Corps for heavy bomber attacks on Oldenburg. A complete account of this affair, prepared by Brigadier Mann, is reproduced at Appendix "A". There is a striking resemblance between the incidents recorded in this

memorandum and those connected with the arrangement of joint planning prior to D Day (paras 14, 15 above). One has the feeling, on reading the two memoranda, of having come full circle.

Dealing with army/air force relations in an address given to the Staff College on 25 Jul 46, Maj-Gen C.C. Mann, C.B.E., D.S.O., (then V.C.G.S.) stated:

In the light of our experience in the North-West Europe campaign, without going into details, I am convinced that, although the mechanics of Command and Control by First Canadian Army/84 Group RAF were probably the best of any of the Empire components, this conception - that war like operations can be conducted with maximum efficiency under a system of Joint Command at this level - is unsound because it does not sufficiently take into account the human factors. I am certain that some other basis of cooperation between the ground and air formations in the field is necessary if our full potential effort is to be brought to bear against the enemy.

While, in the main, the events of the campaign bear out the wisdom of the doctrine nevertheless they disclosed, beyond all doubt, certain serious weaknesses. These weaknesses can be grouped under the heading "Human Factors". This is the fundamental problem. It is inevitable in the field of human relations that Commanders on parallel levels will be inclined to support their own conception as to the way in which they should employ the forces under their command, in giving effect to a combined plan. Recorded events of the North-West Europe campaign bear testimony to the fact that there were differences in outlook between the Commander of 21 Army Group and the Commander of the Second Tactical Air Force supporting him, which resulted, at Army/Tactical Group level in the reduction on several occasions of the actual support given in comparison with the potential support available in the resources controlled by the Tactical Group co-operating with us, and which frequently was a factor imposing difficulties, and delay, in the staff arrangements at the controlling level of command, namely, at HQ First Canadian Army/84 Group RAF.

As I remarked earlier, 84 Group RAF was commanded by Air Vice Marshal Brown prior to and throughout the Normandy campaign, and the pursuit through Northern France. Under his command, 84 Group RAF was a most cooperative organization and the results

achieved were splendid.

Unfortunately, from our point of view, he was considered, by his superior commander, Air Marshal Coningham, to be too co-operative with the Army - he himself told me this at the time when he was relieved of his command.

His successor, Air Vice Marshal Huddlestone [Hudleston] undoubtedly was a competent commander, but it became evident, at once, that there was to be a change in policy - and it also was evident that the reason was primarily to ensure that the independent status of the RAF was emphasized.* Now this would be of no concern to any soldier unless its application was going to operate to the detriment of our operations and result in a probable increase in the proportion of casualties to our attacking ground forces in relation to the results achieved.

When this situation developed, as it did - we naturally were very much concerned indeed.

From what I have said, you can see that it was inevitable that the relations between the Ground Forces and the Tactical Air Forces of the Empire in North-West Europe could hardly be expected to be ideal, as the only way in which the Tactical Air Force could assert its independence was by not agreeing to meet the requirements of the Army on the grounds that the Air Force was responsible for deciding whether or not support was needed, and if so, in what quantity.

With this background, it is appropriate to analyse the relations between First Canadian Army and 84 Group RAF at the various levels of contact and inter-weaving of responsibilities.

Relations between First Canadian Army and 84 Group RAF were good below the Army/Tactical Group HQ level,

(a) At the Group Control Centre, Wings and Squadrons, the personnel who were directly responsible for the actual carrying out of air operations were always anxious to co-operate with the Army. In fact, they preferred missions in direct support of the Army to some of their other commitments, notably interdiction and armed reconnaissance.

^{*}A/V/M Hudleston replaced A/V/M Brown as A.O.C. 84 Gp en 10 Nov 44. Relations with 84 Gp prior to this date had not been so harmonious as is suggested (see paras 60 to 68 above).

- (b) This attitude was reflected in the relations between the ALOs and the pilots and staff officers of junior Air Force formations. They were always on the friendliest and most co-operative terms.
- (c) A similar happy state of affairs existed when staff officers and pilots from Wings and Squadrons were detailed for duty with the FCP and Contact Cars allotted to forward Army formations.
- (d) Relations between Group HQ and Army HQ, however, were only on a cordial basis superficially. The staff at Group HQ were apparently under the impression that the Army was trying to get control of the Air Force formations associated with it. We gained the distinct impression, after Air Vice Marshal Brown was replaced by Air Vice Marshal Huddlestone [Hudleston], that the Air Force was more anxious to assert its independence than to co-operate to the maximum extent with the Army. This apparent anxiety to preserve the autonomy and separate entity of the Air Force as a Service which was never questioned by the Army at any time frequently prejudiced air support operations which would otherwise have been excellent.

On occasion, when they were asked to carry out certain commitments which seemed to the Army to be part of their function, they hedged about accepting these commitments and, to put it bluntly, appeared to lack the moral courage to refuse them outright.

This unfortunate state of affairs was not restricted to First Canadian Army and 84 Group. It also existed at least up to the Army Group level, according to my information.

To give you an illustration I am going to use the Oldenburg incident as an example,* and while of course it might be argued that I am criticizing the policy on the basis of an isolated incident, I assure you that this is not the case. The Oldenburg affair is merely the outstanding case in our experience and far from the only one.

((H.S.)215Cl.091: "Air Sp, N.W. Europe - Maj-Gen Mann, 25 Jul 46", Pt. I, paras 25 - 39)

^{*}Reproduced at Appx "A".

144. The same general attitude is reflected in a report prepared on conclusion of the campaign by Lt-Col W.B.G. Reynolds and Lt-Col T.C. Braithwaite, G.S.Os. 1 Ops Air at H.Q. First Cdn and Second Armies respectively.

Throughout the campaign considerable difficulties were experienced between Army HQ and Tac Group HQ staffs over the manner in which the available air resources were being employed, and particularly in regard to the engagement of targets nominated by the Army. It was considered that these difficulties were due to personalities and consequently were at their worst when the HQs were separated.

An analysis of the periods when relationships were at their best and when the results achieved reached the highest levels, shows that the variations were closely related to the personality aspect. When there was a clash of personalities, both staffs were affected at all levels and the RAF attitude tended to become one in which an Army requirement was regarded with suspicion, and as something to be treated as an opportunity for destructive criticism rather than a matter of joint interest and importance.

Under these circumstances requirements for air action other than those of direct military interest, were frequently used as a reason for refusing Army requests, although the facts did not always support the contention.

These remarks refer to the higher level of Army/Tac Gp HQ and are not applicable to the lower levels of GCC, Wings and Squadrons, or to the pilots themselves.

In all these cases the whole approach to the support of the Army was different and was marked by enthusiasm and a readiness to do the job which was wholly admirable.

It was felt that the origin of these difficulties had its root in Air Force anxiety to preserve the autonomy and separate entity of their service, an anxiety emphasized in their view by the fact that the main function of the Tactical Air Force is to provide air support for the Army. In fact, the principle regarded as being at stake was never questioned by the Army at any time whatsoever, and any fears which may have been entertained in Air Force circles cannot be considered as having the smallest foundation.

((H.S.)215Cl.093(D 3): "Air Sp - First Cdn and Second Armies", 31 May 45, para 31)

145. Commenting on the draft of this paper, Col Beament wrote:

These papers do not touch upon the fundamental organizational problem of air support, i.e. the major command arrangements. I take it that the omission is studied, but whether or not this be the right place to say it, someone, somewhere and at the appropriate time must fight for at least the TAF being under command of the Army Group and the Tactical Groups being in support of Armies, and preferably TAFs becoming an integral part of the Army under the War Office and not the Air Ministry, in fact a specialized supporting arm and not an autonomous service.*

((H.S.)215Cl.099(Dl4): "Air Sp" - Reynolds to Oxborrow, 14 Jun 45, second last para)

It is impossible to comment adequately on these views without prior access to a statement of the air force's case. The anxiety of senior army staff officers to provide maximum air support to the troops they served is understandable and to their credit. T preoccupied themselves with their army's front and the territory immediately forward; their main concern was to save lives by obtaining the maximum air support in that area. The air force staff officers, on the other hand, had equally important considerations to bear in mind. They controlled a weapon of great power, range and flexibility. Extremely sharp limitations, however, were associated with these formidable capabilities. The air force staff officers were responsible for ensuring that the air effort was employed within its capacity and to the best possible advantage. Selection of tasks had to be based on the widest possible survey of possibilities; the air arm's range and flexibility made it capable of operating over an area much wider and deeper than an army front. Every care, also, had to be taken to avoid squandering the air effort on tasks which were not vitally necessary, or could be performed by other means. It is to be expected that two groups, approaching the problem of air planning from such widely different points of view, would have differences of opinion. It would, however, be rash to assume that the air force was always -- or even most of the time -- in the wrong. It would be equally rash to conclude that the occasional unpleasant incident invalidated the whole system. There were, after all, more instances of successful cooperation than of bickering.

147. The system of planning in close association under separate command had definite advantages. It ensured that the air effort was considered throughout the planning, and not added as a bonus at the end. It provided expert advice on air matters during the planning process. Most important of all it ensured that the wider possibilities for use of the air effort were examined, in a search for the most economical and effective employment of that expensive arm. At the

^{*}This comment makes it clear that at least one senior staff officer at H.Q. First Cdn Army had designs on the air force's autonomy - designs specifically disclaimed by the others, and at variance with Gen Montgomery's firm policy (para 93, 93A above)

same time, the system placed heavy demands on the military knowledge, the tact and co-operative spirit of the officers involved. It could be that the army spoint of view reflects the result of these heavy demands, more than any fatal weakness inherent in the system. This, at least, would appear to be the opinion of the very highest of our military authorities, for planning in close association under separate command still forms the keystone of our doctrine on air support of ground troops.

148.

This report was written by Maj H.W. Thomas.

H.W. Thomas Maj C.C.P. Stacey) Colonel, Director Historical Section. APPENDIX "A"

to

Hist Sec AHQ Report No. 74

(Page 1 of 7 pages)

THE OLDENBURG INCIDENT

Maj-Gen CC Mann, C.B.E., D.S.O

25 Jul 46

THE OPERATIONAL BACKGROUND

It was appreciated that the Germans would hold the WILHEIMS-HAVEN and EMDEN peninsula, probably with one Para. Army, along the natural defensive line of the KUSTEN Canal, between the R. WESER and the R. EMS.

In this defensive position, OLDENBURG, as a net-work of road and rail communication on the higher ground, constituted a central pivot.

It was therefore considered that OLDENBURG would be defended as a bastion to the full extent of the enemy's resources, in order that he could secure his position along the KUSTEN Canal, the Peninsula, and, in particular, the fortress ports of WILHEIMSHAVEN and EREMEN.

SEQUENCE OF DEVELOPMENTS

Afternoon 14 Apr 45

- 1. Request received from 2 Cdn. Corps for air attack on OLDENBURG.
 - (a) Acceptable up to 2400 hrs on 16 Apr.
 - (b) Purpose disruption of road and rail communications used by enemy reinforcements.
 - (c) Heavy Bombers particularly requested by Corps Commander (Lt-Gen. G.G. Simonds).

Joint Evening Conference 1830 hrs 14 Apr

- 2. Request (1) above, discussed at routine conference H.Q. First Cdn Army/84 Gp.
 - (a) Agreed suitable in principle, subject to selection of aiming points.
 - (b) Following (a) the GSO 1 Ops Air First Cdn Army, with the Colonel GS conferred with the G/C Ops 84 Gp, and jointly selected four aiming points as being suitable.
 - (c) In accordance with established practice, the request for air support beyond the resources of 84 Gp was submitted through both Army and Air Force channels; i.e.,

First Cdn Army to 21 A Gp 84 Gp to 2 TAF

(d) The request was accepted by both higher H.Q. for attack by a Gp (Light Bombers of 2 T.A.F.) which carries heavier loads than the Tac Gp aircraft of 84 Gp.

It was, of course, accepted subject to availability.

Afternoon 15 Apr 45

- 3. The request was cancelled -
 - (a) by A.O.C. 84 Gp with 2 TAF
 - (b) Without notification to First Cdn. Army.
- 4. I, as Chief of Staff, First Cdn. Army, upon learning of cancellation, went at once to AOC 84 Gp to discuss the matter.
- 5. In discussion with the AOC and his SASO it was again agreed -
 - (a) That the targets in OLDENBURG were suitable
 - (b) That more detailed target intelligence should be at once prepared, in order to satisfy any inquiries from HQ 2 TAF.
 - (c) That the matter would be re-considered for resubmission on morning of 16 Apr.
- 6. It should be observed that, vide para 1
 (a) above, the Commander 2 Cdn Corps
 wanted the attack before 2400 hrs 16 Apr 11
- 7. The target Intelligence Section, First Cdn Army, (which included certain RAF personnel) worked throughout the night to complete the added requirements, and did so by 1000 kms, 16 Apr.

Morning 16 Apr

- 8. Target material submitted to G/C Ops 84 Gp RAF.
 - 10 Targets were selected, consisting of the railway station, freight sheds, and a collection of military installations, barracks storage dump, MT sheds, etc.
- 9. After consideration of the material, and, apparently, certain conversations with H.Q. 2 TAF, the G/C Ops 84 Gp stated to the Colonel GS, First Cdn Army, that -
 - "(a) the targets were NOT within the resources of 3L. Gp RAF for either of the two following reasons:
 - (i) they were NOT suitable for attack by fighter bombers;
 - (ii) because of the limited availability of long range aircraft there was NO effort available.

- "(b) The present policy at the higher HQ was that targets would NOT be attacked within German towns and cities unless it had been demonstrated that ground tps were unable to capture the town or city in question without the benefit of air attack.
- "(c) That 21 Army Gp did NOT apparently appreciate the op situation with respect to OLDENBURG as we did, since they had NOT supported our request in such terms with 2 TAF.
- "(d) That, in any event, the AOC 84
 Gp RAF and the Army Comd had
 discussed the problem of air
 attack in OLDENBURG the previous
 evening, and had agreed that
 there was NO requirement, and that
 it was his understanding in
 addition that the matter had also
 been considered by the C in C 21
 Army Gp and the AOC in C 2 TAF,
 apparently with the same results,
 and that therefore any further
 consideration by us was purely
 academic.
- 10. The Colonel G.S. informed me that he had made the following points with the G/C Ops:
 - "(a) That it seemed most improbable that any policy existed concerning air attacks in sp of the Army which necessitated the ground forces demonstrating failure in their ground ops before the RAF were prepared to provide the air sp required, and that, in any event, this was the first intimation to us of any such policy from any source..
 - "(b) That if the op appreciation upon which this request was based was NOT shared by 21 Army Gp, he would be most surprised because it was the view held by 2 Cdn Corps and this HQ, and NO indication had been given to us that 21 Army Gp felt differently in the matter. If, however, the difficulties which we were experiencing were due to a different op appreciation by 21 Army Gp which precluded them supporting our request, then obviously our argument was with 21 Army Gp and NOT with 84 Gp RAF, and that therefore he proposed to discuss the matter at once with 21 Army Gp."

11. The Colonel G.S. then continues in his report -

"I then telephoned BGS Ops Air 21
Army Gp and reported on the posn
concerning these requests as outlined
above, and asked that I might be
advised as to the policy alleged by
the G/C Ops and the op appreciation
concerning OLDENBURG held by 21 Army
Gp. BGS Ops Air 21 Army Gp stated
as follows:

- (a) That 21 Army Gp held the same appreciation of the op situation as we did, and as stated above.
- (b) That 21 Army Gp felt so strongly on the matter that he had prevailed upon the A/Chief of Staff 21 Army Gp to attend the Joint Evening Conference at 21 Army Gp/2 TAF on the evening of 15 Apr to speak on the question of our requests for air sp on OLDENBURG. When the matter had been raised 2 TAF refused to consider it on its merits on the ground that they were without jurisdiction in this matter in view of the fact that NO requests for these attacks had been received from 84 Gp RAF.

"I reported this situation to you at lunch on 16 Apr. On my return from lunch I spoke to the G/C Ops 84 Gp RAF, informing him of the infm I had received from BGS Ops Air 21 Army Gp referred to above. He stated that 2 TAF had probably told 21 Army Gp that 84 Gp RAF had NOT requested the engagement of these targets as 2 TAF apparently did NOT like the targets and that was the simplest manner of disposing of them. I expressed my surprise that he should suggest that his higher HQ would indulge in such dishonesty in their inter- service dealings with 21 Army Gp. G/C Ops then proceeded to review the target material in detail, and having ruled out eight of the ten targets as being unsuitable for air attack, reluctantly agreed to request air attack on the first two, namely 0 1 and 0 2. I instr GSO 1 Ops Air to infm Ops Air 21 Army Gp that 84 Gp RAF were requesting engagement of targets 0 1 and 0 2. I then reported the situation to you and suggested that the whole matter required review on your level.

"We then called upon the SASO and the G/C Ops in the former's office and commenced a discussion on the targets in question. As this was proceeding, the AOC 84 Gp RAF entered the SASO's office and looked at the target material. It was apparent that he was quite prepared to consider all the targets on their merits. We stressed the necessity of attacking mil installations with a view to disrupting sig comns and the arrangements which the enemy would be proceeding with in organizing the def of the city. After discussion, he ruled that four of the targets, namely 08, 07, 03 and 04, should be submitted to the higher HQ, suggesting attack by 2 Gp, and that the remainder of the targets other than Ol and O2, which he did NOT consider would pay an adequate dividend should be engaged by resources of 84 Gp RAF. It is to be noted as set out in para 11 above that 01 and 02 were the only targets of the ten in question which the G/C Ops was prepared to submit to the higher HQ or accept for air attack.

"I arranged the extension of time of attack with 2 Cdn Corps until 172400B, and submitted the requests for targets 08, 07, 03 and 04 to BGS Ops Air 21 Army Gp, explaining what had passed between 84 Gp RAF and ourselves, and the fact that they were submitting similar requests through RAF channels to 2 TAF.

"During the evening of 16 Apr, we were infm by Ops Air 21 Army Gp that the targets had been accepted for 2 Gp with a turn-around on 17 Apr, and we, later, received a copy of the 2 TAF OO concerning the attack of these targets.

"After our morning conference on 17 Apr, the GSO 1 Ops Air confirmed that the first two targets, namely 08 and 07 were being attacked by 2 Gp with sixty med bombers at 0940B, and I infm you accordingly.

"Later during the morning, I understand that the A/Chief of Staff 21 Army Gp called you to enquire whether we really wished to have these targets attacked, and that the gist of your reply was that we did indeed, as evidenced by the fact that we had been striving in every known way for 48 hrs to effect that result. We were later infm by the GSO 1 Ops Air, on advice of Ops Air 21 Army Gp, that at 0930B hrs today, 17 Apr, while the 2 Gp force of sixty med bombers was airborne and prepared

to engage targets 08 and 07, that the AOC in C 2 TAF had personally cancelled the attacks without ref to 21 Army Gp.

"On learning this I telephoned the BGS Ops Air 21 Army Gp and enquired as to what was going on in connection with the attacks by 2 Gp on these targets. He reported the situation as follows:

- (a) That at the morning joint conference at 21 Army Gp/2 TAF, the rep of 2 TAF describing the day's air ops had omitted any ref to attack on targets in OLDENBURG.
- (b) That on the conclusion of the conference the AOC in C 2 TAF had stated that he had personally cancelled the attacks of 2 Gp on the OLDENBURG targets at 0930B hrs this morning, 17 Apr, because when the attacks had been brought to his attention he had recalled a policy promulgated by SHAEF precluding attacks on all barracks in GERMANY in view of the fact that such attacks would later deprive Allied forces of accn.
- (c) That 21 Army Gp, after the meeting, had requested that this SHAEF policy be shown to them as it was unknown to them. It was impossible for 2 TAF to produce the policy which apparently did NOT in fact exist. It is presumed that the AOC in C 2 TAF was confused with some criticism which a senior airforce offr of SHAEF had apparently made concerning unnecessary attacks on certain barracks in the RUHR under circumstances which were NOT relevant to this matter.
- (d) That at this time at the request of 2 TAF, the A/Chief of Staff 21 Army Gp had called you to ensure that we really did want these targets attacked as noted above.
- (e) That, on receiving your assurance, they had again pressed for the attacks which were finally reluctantly accepted, and arrangements made to proceed with them this afternoon. Because of the time lost by the cancellation of the attacks at 0930B hrs this morning, it is NOT now possible to complete the four targets today as there is NOT sufficient time for a turn-around.

(f) I have requested 2 Cdn Corps for an extension of time for attacks on OLDENBURG until 182400B Apr, and warned 84 Gp RAF and 21 Army Gp that we will require the remaining two targets to be attacked tomorrow 18 Apr, subject to weather permitting.

"Att hereto at Appx "A" target list dated 16 Apr 45, particularizing the targets in question. (not attached for lecture purposes).

"I have stated in this memorandum, the best of my knowledge and belief, a true picture of what has taken place in connection with endeavouring to obtain air sp beyond the resources of 84 Gp RAF to sp the ops of 2 Cdn Corps. If it is considered that any of the statements contained in this memorandum are offensive from the standpoint of inter-service relations, I shall gladly re-write the memorandum for such purposes as you may require to use it, NOT as an admission of unfairness as to its content, but solely as a concession to the proprieties and requirements of our inter-service relations. It will be noted that in the result it has taken 72 hrs to obtain any air sp beyond the resources of 84 Gp RAF on these targets required to sp the ops of 2 Cdn Corps, and that the full effort of 2 Gp on turn-around has been lost to it under ideal conditions of weather. Further-more, this slow and unsatisfactory re-sult has only been achieved at the expenditure of a very considerable time and effort, quite unnecessarily, by a number of senior offrs at this HQ and HQ 21 Army Gp."

12. The situation was discussed by me fully with General Crerar, G.O.C. in C., First Cdn Army, who directed that no further action should then be taken, in view of the obvious large issues involved, and also having regard to the stage reached in the war against Germany.

((H.S.)215Cl.091: "Air Sp, N.W. Europe", Appx "3")