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The Journal of Military History, Volume 67, Number 1, January 2003,
pp. 137-173 (Article)

Published by Society for Military History
DOI: <https://doi.org/10.1353/jmh.2003.0064>



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Best-Laid Plans: Guy Simonds and Operation Totalize, 7–10 August 1944



Jody Perrun

Abstract

First Canadian Army's fighting fitness in the Battle of Normandy has long been a point of debate among military historians. Because Operation Totalize did not result in the early conclusion of the campaign, some suggest that the Canadians could have fought more effectively. Heavy air support was a crucial component in the plan for Totalize, but it has received insufficient attention from historians. A focus on the role of air power suggests that previous explanations for the operation's failure, and criticism of Guy Simonds's generalship, are in need of revision.

BETWEEN 7 and 10 August 1944, Lieutenant-General Guy Simonds's 2nd Canadian Corps waged a battle south of Caen that could have brought about an early and more decisive conclusion to the Normandy Campaign had the Canadians reached the objective of Falaise and completed the encirclement of the German Fifth Panzer and Seventh Armies. The failure to take Falaise during Operation Totalize constituted a missed opportunity of great significance for the balance of the campaign in Northwest Europe. An unqualified understanding of the battle has been thwarted by a relative lack of scholarly attention as well as the enigmatic nature of available evidence. The secondary literature has not benefited from the degree of interest generated by operations like the Dieppe raid, to which numerous monographs have been devoted. Most secondary accounts of Totalize

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have therefore been chapter-length studies in works with a more general scope.¹ In the absence of more exhaustive inquiry, particularly into the process of planning the battle, a number of myths have been perpetuated which purport to explain the failure of Totalize to realise all that was expected of it.

Substantial criticism of Simonds's generalship and the performance of 2nd Canadian Corps has been largely based on the acceptance of three major myths. First, the operation was doomed in advance by a plan that was tactically flawed, too complex, and too rigid. Second, by adhering to a preconceived air support plan that was intended to blast open a path to Falaise, Simonds permitted a pause in the advance that squandered a momentary opportunity to break through, thus allowing the Germans time to regroup and stabilize their defences. As if these fundamental weaknesses were not sufficient cause for failure, critics place a full measure of blame on the inexperienced 4th Canadian and Polish Armoured Divisions, which allowed a few tanks and antitank guns to stop them when more seasoned formations would have boldly pushed on up the road to Falaise in the operation's second phase.²

There are elements of truth behind these myths, but as explanatory factors they ultimately leave too many questions unanswered. Why did Simonds choose to build his plan around heavy bombers, which, according to Kurt Meyer, commander of the 12th SS Panzer Division *Hitlerjugend*, "transferred the initiative from . . . leading combat elements to timetable acrobats of . . . Headquarters"?³ Why did he not cancel the Phase II bomber strike on the morning of 8 August, by which time the success of the initial advance supposedly left the road to Falaise undefended and open? Simonds and his troops have been judged partly on

1. See, for example, Chester Wilmot, *The Struggle for Europe* (London: Collins, 1965); George Stanley, *In the Face of Danger: The History of the Lake Superior Regiment* (Port Arthur, Ont.: Lake Superior Scottish Regt., 1960); John A. English, *The Canadian Army and the Normandy Campaign: A Study of Failure in High Command* (New York: Praeger, 1991); Roman Jarymowycz, "Canadian Armour in Normandy: Operation 'Totalize' and the Quest for Operational Maneuver," *Canadian Military History* 7 (Spring 1998): 19–40; and J. L. Granatstein, *The Generals: The Canadian Army's Senior Commanders in the Second World War* (Toronto: Stoddart, 1993). For histories of Dieppe see J. P. Campbell, *Dieppe Revisited: A Documentary Investigation* (London: Frank Cass, 1993); Brereton Greenhous, *Dieppe, Dieppe* (Montreal: Art Global, 1993); Denis and Shelagh Whitaker, *Dieppe: Tragedy to Triumph* (Toronto: McGraw, 1992); Brian Loring Villa, *Unauthorised Action: Mountbatten and the Dieppe Raid* (Toronto: Oxford University Press, 1989); Terence Robertson, *The Shame and the Glory* (Toronto: McClelland, 1962); among others.

2. Wilmot, *The Struggle for Europe*, 411–13; Stanley, *In the Face of Danger*, 157; English, *The Canadian Army*, 263–88; Jarymowycz, "Canadian Armour in Normandy," passim; and Granatstein, *The Generals*, 169.

3. Kurt Meyer interview, 3 September 1950, 73/1302, Directorate of History and Heritage (hereafter DHH), Department of National Defence, Ottawa.

the basis of testimony from combatants like Meyer, but a satisfactory evaluation must begin with a detailed examination of the relationship between intelligence and the interservice planning process. The following analysis therefore traces a complicated series of meetings and reports both to ascertain what Simonds knew at various points during that process, and to reveal the parameters that were imposed upon him as the *quid pro quo* of a joint operation. Critics who have not done so attribute to Simonds, by default, a degree of control that he simply did not have. Factors influencing command decisions were far more complicated than the mythology suggests, and the fog and friction of war affected the execution of his plan far more significantly.

Simonds made air support a key element in his plan first and foremost because the tools with which he had to work were not adequate to overcome the German defences at a sustainable loss rate. The Allies' pre-war failure to analyse seriously the problems of armoured warfare was the most important debt that had to be paid during the battles in Normandy. Not expecting to make a grand continental commitment, neither the British nor the Americans had overly concerned themselves with the development of progressive tank designs or assault tactics before the war. The result was the significant and much-discussed qualitative disparity between the Allies' standard tank, the Sherman, and the German Panther and Tiger tanks. Both of the latter had heavier armour and more powerful guns than the Sherman, although they were not as mechanically reliable. Fortunately for the Allies, the enemy possessed fewer of these than the smaller and much less dangerous Panzer IVs. Those that were available made an impact beyond their numbers in morale effect alone; realizing that their standard antitank weapons had little effect on such monsters must have occasioned much anxiety among Allied tank crews and antitank gunners.

The comparative weakness of Allied armour was symptomatic of the lack of an appropriate doctrinal guide, which now had to be formulated as the campaign wore on. Not surprisingly, therefore, the Allies failed, on occasion, to coordinate the right weapon with the right tactics. Cooperation between armour and infantry was only one example. While the infantry expected mobile gunnery and direct support against enemy targets, Allied armour could not survive engagements with German tanks and antitank guns in open ground. Tank crews thus preferred to offer indirect support from dead ground.⁴ The improvised use of strategic bombers did not make this problem go away, but by incorporating them into his plan for Operation Totalize, Guy Simonds attempted to compensate for the army's tactical weakness with additional firepower.

4. Terry Copp and Robert Vogel, *Maple Leaf Route: Falaise* (Alma, Ont.: Maple Leaf Route, 1983), 26–28.

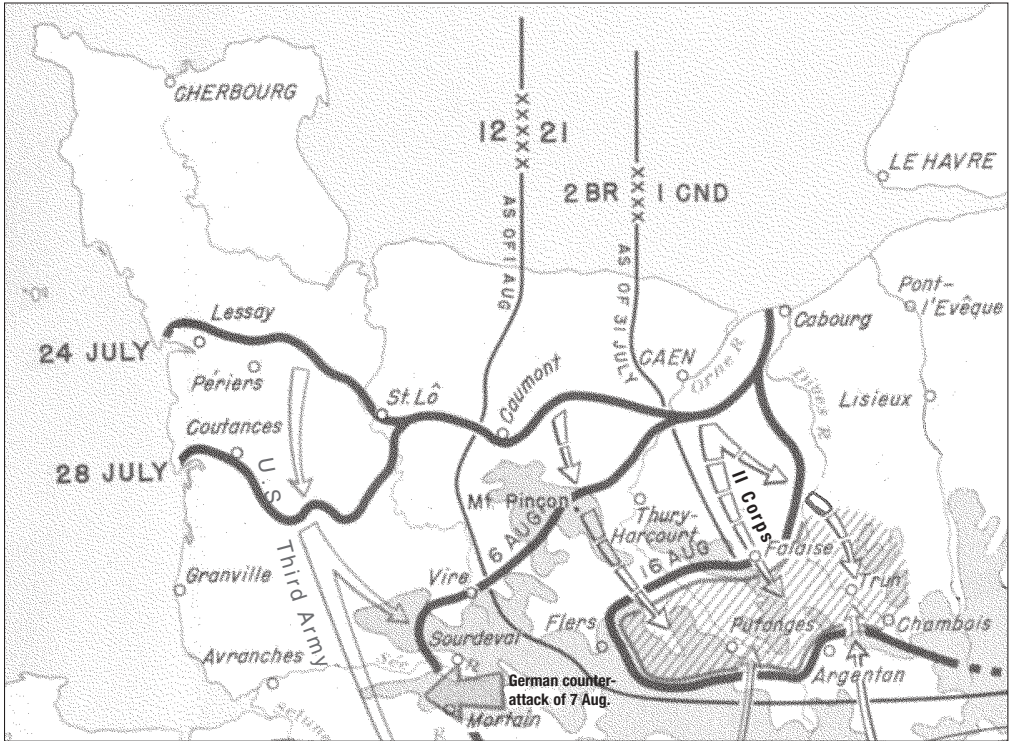
Because that firepower could be applied either in conjunction with or independent of 2nd Corps's artillery, he hoped it would also alleviate the logistical problems of maintaining support during a breakout.

By late July 1944, 21st Army Group seemed poised to make that breakout. The Allied advance following the D-Day landings had been slow, and it had seemed that a stalemate might develop. Caen, a D-Day objective, was finally taken on 9 July during Operation Charnwood. The open ground south of the city promised adequate space for the employment of armour, and the first major tank operation by Lieutenant-General Miles Dempsey's Second British Army was launched on 18 July. Operation Goodwood saw a massive heavy bomber strike on the flanks of the advance, which was led by three armoured divisions. Goodwood ground to a halt in the face of stiff German antitank defences, and although the results of the bombing attacks were inconclusive, soldiers interviewed by British operational research personnel "were unanimous in their desire for more bombing support." One important conclusion drawn from Goodwood was the need for an air plan which would hit targets in depth as the leading troops advanced.⁵

The results of Goodwood were disappointing, but the lessons learned would be applied in Simonds's plan for Totalize. Meanwhile, the Normandy bridgehead had been expanded enough to allow the buildup of forces that General Bernard L. Montgomery wanted before he felt strong enough to push the Germans back toward the frontiers of the Reich. First Canadian Army, under Lieutenant-General H. D. G. Crerar, became operational on 23 July and took over the eastern flank of 21st Army Group. Crerar commanded 1st British Corps and, from 31 July, Simonds's 2nd Canadian Corps, which had just been defeated with heavy casualties in its attempt to take Verrières Ridge in Operation Spring on 25 July. That same day First U.S. Army began its breakout operation, Cobra, on the western flank.

Like Dempsey, American General Omar N. Bradley had opted to use heavy bombers to open a gap in the German defences along the St. Lô-Périers road, into which poured his armoured and motorized divisions. Cobra was ultimately a success, but it included two short bombing incidents by the American Eighth Air Force. Though poor weather in Normandy caused a twenty-four-hour postponement on 24 July, the decision had come too late to call back bombers that were already in flight. Only a portion of the aircraft dropped their bombs, but a number struck American positions, killing 25 and wounding 131. When the oper-

5. 21 Army Group No. 2 Operational Research Section (ORS) Report No. 6, "Bombing in Operation Goodwood," reproduced in Terry Copp, ed., *Montgomery's Scientists: Operational Research in Northwest Europe* (Waterloo, Ont.: Laurier Centre for Military, Strategic and Disarmament Studies, 1999).



An overview of the Normandy campaign during late July and early August 1944.

ation went ahead the next day, more short drops killed another 111 and wounded 490.⁶ On the other side of the road, however, the bombing was a stunning success. The German Panzer Lehr Division, concentrated inside the target zone, was virtually annihilated.

Following Operation Cobra, Montgomery had issued a directive on 27 July which specified that “large scale operations” were not to be undertaken on the Caen front because the Germans, with seven panzer divisions in the area, were too strong there. Still, the changed circumstances that issued from Cobra made it essential to prevent any shift of these strong armoured forces to the west where they might interfere with the developing American breakout. First Canadian Army was therefore to make additional, limited holding attacks while Second British Army

6. Richard G. Davis, *Carl A. Spaatz and the Air War in Europe* (Washington: Center for Air Force History, 1993), 470–74. Casualty statistics vary depending on the source of information.

prepared to deliver the “main blow on the eastern flank.” Second Army accordingly launched Operation Bluecoat in the Caumont sector, southwest of Bayeux. It began on 30 July but, as with Goodwood, success was limited.⁷

By the time Bluecoat began the German armour had already started to move. Of the panzer divisions on the Caen front on 26 July, 21st Panzer, 12th SS, 1st SS, and 10th SS were holding parts of the front line, while 116th, 2nd, and 9th SS were in reserve. On 27 July, 2nd and 116th Panzer moved west to bolster the desperate Seventh German Army. 9th SS and 10th SS Panzer Divisions then moved to counter Bluecoat beginning on 1 August. During a meeting with Crerar on 29 July, Montgomery again “emphasized the importance of holding in place, as far as possible, the strong enemy forces” south of Caen.⁸ His subsequent directive, issued a few days later, officially ordered First Canadian Army to attack toward Falaise with the object of capturing as much terrain as possible and cutting off the enemy forces opposing Second Army across the Orne.⁹ Crerar assigned the task to the commander of 2nd Corps, but as events unfolded during the first week of August, Simonds’s operation took on an entirely greater significance than had originally been forecast.

The architect of Operation Totalize had more combat command experience than any of the other Canadian general officers serving in Normandy, Crerar included, yet this amounted to a mere six months leading the 1st Canadian Infantry and 5th Canadian Armoured Divisions in Sicily and Italy. He was one of the few elite officers in the Canadian Army, having attended the British Staff College at Camberley in 1936 and 1937. Of the teaching there he later said, “[t]he essence . . . was not to indoctrinate officers with preconceived theories, but to make them think and come up with their own solutions to the problems of modern war.” Simonds was the sort of officer who took those lessons to heart. He was an intellectual, considered by Montgomery to be the *only* Canadian general “fit to hold high command in war.” To Bradley, he was the “best of the Canadian generals,” and Lieutenant-General Brian Horrocks, whose 30th British Corps would serve under First Canadian Army during much of the fighting in the Rhineland later in the war, said Simonds was “a first-class commander with a most original brain and full of initiative.” Apart from his brilliance, Simonds developed a reputation as a hard-driving commander who was ruthless in “sacking” subordinates

7. Copp and Vogel, *Maple Leaf Route*, 80.

8. C. P. Stacey, *Official History of the Canadian Army in the Second World War*, vol. 3, *The Victory Campaign: The Operations in North-West Europe 1944–1945* (Ottawa: Queen’s Printer, 1960), 199–204.

9. 21 Army Group M516, 4 August 1944, MG 30 E157, v. 2, H. D. G. Crerar Papers (hereafter CP), National Archives of Canada (hereafter NAC).

who did not produce results. One brigadier summed him up: Simonds was “not a man one could love. In my heart I knew, however, that I would rather serve under [his] type than under a more kindly but less driving commander; the former is much more likely to win the battle.”¹⁰

Simonds had set down an operational policy in February 1944 to guide training within his corps, then preparing for the Allied advance that would follow the first stage of Overlord—the securing of the lodgement area and the buildup of 21st Army Group. The policy noted the characteristics of the German defence system and tactics that were to be expected: a sparsely held line of outposts strongly supported by machine guns and mortars, with inevitable armoured counterattacks to retake lost ground. Simonds explained that the

success of the offensive battle hinges on the defeat of the German counter-attacks, with sufficient of our own reserves in hand to launch a new phase as soon as the enemy strength has spent itself. The defeat of these counter-attacks must form part of the original plan of attack which must include arrangements for artillery support and the forward moves of infantry[-]supporting weapons—including tanks—on the objective.¹¹

Simonds had been trained as an artillery officer, and his preferred method of assault was informed to a significant extent by the abilities and limitations of the artillery. Attacking divisions were to operate on narrow frontages with forces disposed in depth, a decision prompted by the inability of divisional artillery to support more than one of its three brigades at a time. Likewise, the divisional engineers could open and maintain only one two-way route to handle the division’s traffic. The narrow front and resulting depth of the division would give it “staying power,” which in turn would enable offensive operations to be planned with fewer phases. Simonds defined a phase as “the transfer of responsibility between units and formations and their commanders for continuance of operations,” and every new phase meant a pause while the transfer was carried out, which would give the enemy time to recover from the initial shock of an assault. Because counterattacks would be supported by tanks and mortars, and the effective range of enemy mortars caused them to be sited approximately four thousand yards behind the forward positions, the first phase of an assault must have planned objectives at least four thousand yards within the German positions if the mortars were to be put out of action before they could interfere with consolidation on the objectives.¹²

10. The officers noted are quoted in Granatstein, *The Generals*, 151, 146, 172–73.

11. Simonds’s policy is reproduced in Copp and Vogel, *Maple Leaf Route*, 46.

12. English, *The Canadian Army*, 238–40.

Simonds also ordered that special consideration be given to determining the point at which artillery should be moved forward during the attack, because during the resulting pause the leading troops would be without full fire support. This question posed a dilemma: should attacking forces continue beyond their objectives in order to exploit the temporary opportunity presented by the enemy's disorganization, thus incurring the risk of moving beyond the range of their fire support, or should they accept a pause and wait for the guns to move up? As a rule, Simonds believed it necessary to wait for support. Given Allied air supremacy in Northwest Europe by the summer of 1944, the problem of the pause could be alleviated with a method that he had first proposed before the war. Simonds had written, in 1939, that

[a]ir bombing may develop to the stage where massed air craft, converging from distant aerodromes, can provide a sustained bombardment of the necessary accuracy and intensity to give covering fire to troops. This would obviate the difficulty of a secret concentration of masses of artillery close to the front of attack.¹³

By the time Simonds began to plan Operation Totalize, precedents for the use of heavy bombers to provide ground support had already been set in Operations Charnwood, Goodwood, and Cobra, although senior air officers were strongly opposed to such missions. There is much evidence of an almost antipathetic interservice rivalry that seriously hindered army-air force cooperation, and such attitudes particularly thrived within the Royal Air Force (RAF).¹⁴ Eighth Air Force and RAF Bomber Command operated under the direction of General Dwight D. Eisenhower and SHAEF (Supreme Headquarters, Allied Expeditionary Force) during the Battle of Normandy, however, so with these resources available Simonds used his prewar thinking as the theoretical foundation for Totalize. By using air support as a substitute for artillery, he would be presented with the additional problem of coordinating air strikes with the ground assault. The degree of cooperation required by such tactics would prove elusive, given the state of communications technology in 1944 and the jealous guarding of jurisdiction that occurred within the air forces.

Simonds's tactical doctrine may have looked fine on paper, but his corps had been roughly handled by the Germans during Operation Spring. Contradicting Simonds's ideas about narrow frontages was the

13. G. G. Simonds, "What Price Assault Without Support?," *Canadian Defence Quarterly* 16 (October 1938–July 1939): 147.

14. Ian Gooderson, "Heavy and Medium Bombers: How Successful Were They in the Tactical Close Air Support Role During World War II?," *Journal of Strategic Studies* 15, no. 3 (1992): 395–96; Charles Carrington, *Soldier at Bomber Command* (London: Leo Cooper, 1987), passim, esp. 152, 194.

experience gained by 3rd Canadian Division since D-Day, which taught that assaults were better launched on wide fronts so as to compel the enemy to disperse his defensive power.¹⁵ And for all the discourse on taking objectives and defending them against counterattacks, how was this to be done? The first requirement was to breach the forward line of defensive positions, which, as in Cobra, was usually done with infantry divisions. Because of the infantry's vulnerability to the small-arms fire and fragments from mortar bombs that covered these positions, the initial breach could more easily be made by armour. The accepted role of the tanks, however, was the exploitation of the breach, and in any case, infantry were needed to neutralize the antitank guns in the rear areas if the tanks were not to be shot up like ducks in a gallery. The problem, therefore, became one of enabling the infantry to reach the guns in the rear by moving them safely through the forward zone.¹⁶ Once the forward line was broken and first-phase objectives reached, how were the counterattacks to be dealt with? One way to prevent reinforcements from interfering, according to historian John A. English, "was to isolate the objective area by boxing it in with [artillery] barrages."¹⁷ These were the two essential problems confronting Simonds when he began to plan Operation Totalize at the end of July.

Opposite the Canadian positions on the northern slope of Verrières Ridge, which had remained in German hands despite repeated attacks since Goodwood, were two lines of defence that would have to be broken before Falaise was reached. The forward position occupied the line from May-sur-Orne through Tilly-la-Campagne to La Hogue, and was dominated by the high ground at Point 122, about two miles to the rear. Previous attempts to take May and Tilly had been especially bloody and futile affairs. The second "partially prepared" position extended from Bretteville-sur-Laize to St. Sylvain, and was controlled by the high ground about Hautmesnil, somewhat less than a mile in the rear. Both lay astride the Caen-Falaise road, which would serve as 2nd Corps's axis of advance. Photo reconnaissance had identified "a mass of small weapon pits and potential M[achine] G[un] sites" between the two positions.¹⁸ Intelligence had been able to "accurately" locate the main gun areas that would provide further support to the German lines. Long-range batteries, comprising sixty to seventy 88-mm antitank guns and similar numbers of 20-mm anti-aircraft guns controlled by Wolfgang Pickert's 3rd Flak Corps, occupied positions behind the secondary line.¹⁹

15. English, *The Canadian Army*, 250.

16. Stanley, *In the Face of Danger*, 153.

17. English, *The Canadian Army*, 273.

18. Current Reports From Overseas #57, 30 September 1944, 87/243, DHH.

19. G. W. L. Nicholson, *The Gunners of Canada: The History of the Royal Regiment of Canadian Artillery*, vol. 2, 1919–1967 (Toronto: McClelland, 1972), 313.

Across the Orne, Panzer Group West faced Second Army, and Simonds recognized the importance to the Germans of holding these two defensive lines in order to guard their positions on the Orne.²⁰

As of 1 August the frontline defences were being held by 1st SS and 9th SS Panzer Divisions, which had been mainly responsible for defeating Operation Spring. Intelligence indicated that each division was keeping one of its two infantry regiments in the rear area to work on the secondary position and to “form the nucleus of a defence in the event of a ‘break in.’” Simonds assumed that in such an event, the Germans would “rely on being able to get tanks and SPs [self-propelled guns] back” to improvise a defence on the rear position. 12th SS Panzer Division *Hitlerjugend* was believed to be in “close reserve opposite our front,” so it could be expected to counterattack on 2nd Corps’s eastern flank.²¹ The Corps Intelligence Summary for 28 July also anticipated the arrival of an additional infantry division from Fifteenth Army, still waiting in vain for the “real” invasion north of the Seine River in the Pas-de-Calais. Intelligence predicted that the Germans would have to replace the armoured divisions on the Caen front with infantry so that the former could be moved to stabilise the critical situation on Seventh Army’s front:

Three days ago the enemy appeared to be using his tanks to provide a screen behind which the infantry could dig defences. It was then believed, and was probably the case, that his infantry was spread very thin along the line. It is unlikely that the infantry positions discovered by [tactical reconnaissance] would increase in extent daily without him contemplating further infantry to man them.²²

Although they were “spread thin,” the Germans would likely “concentrate their infantry around tactically important localities, and . . . leave gaps in parts of the line which they would cover by fire from automatic weapons and antitank guns.”²³ On 1 August, First Canadian Army Intelligence also reported the “beginning of a third line . . . 2000 [yards] in length, two miles NORTH of POTIGNY.”²⁴ Simonds was therefore confronted by three potential defensive lines covered by an array of machine guns, *Nebelwerfers*—the dreaded “moaning Minnies,” multi-barrel rocket projectors—and numerous artillery pieces including large numbers of equally notorious 88s. Though understrength in infantry, the

20. Appreciation for Operation “Totalize,” 1 August 1944, v. 2, CP.

21. Ibid.

22. 2nd Canadian Corps Intelligence Summary #18 for 28 July 1944, v. 13711, RG 24, NAC.

23. Current Reports From Overseas #57, 30 September 1944, 87/243, DHH.

24. First Canadian Army Intelligence Summary #33 for 1 August 1944, v. 13645, RG 24, NAC.

firepower and armoured counterattacks that the Germans could bring to bear compelled Simonds to devise an innovative plan if a débâcle like Operation Spring was not to be repeated.

Against this backdrop, Simonds produced a written appreciation for Operation Totalize on 1 August. It noted the German dispositions opposite the front of 2nd Corps, and explained the significance of the open terrain for the impending attack: it would offer little cover for infantry or tanks, and “the long range of [German] antitank guns and mortars, firing from carefully concealed positions, provides a very strong defence in depth.” Because the original object of the operation was to hold the German armour on the Caen front, the Canadians had “done everything possible to indicate that we intend to continue attacking.” Surprise could not be achieved, therefore, except in respect to the exact time and method of attack. The concept behind Simonds’s proposed method was strongly influenced by Operation Goodwood. On 18 July he had watched as twenty to thirty tanks were destroyed within seconds of crossing the startline for the attack. Resolved to find a less costly method,²⁵ he told Crerar:

In essence, the problem is how to get armour through the enemy gun screen to sufficient depth to disrupt the German antitank gun and mortar defence, in country highly suited to the tactics of the latter combination. It can be done

(a) By overwhelming air support to destroy or neutralize enemy tanks, antitank guns and mortars.

(b) By infiltrating through the screen in bad visibility to a sufficient depth to disrupt the antitank gun and mortar defence.

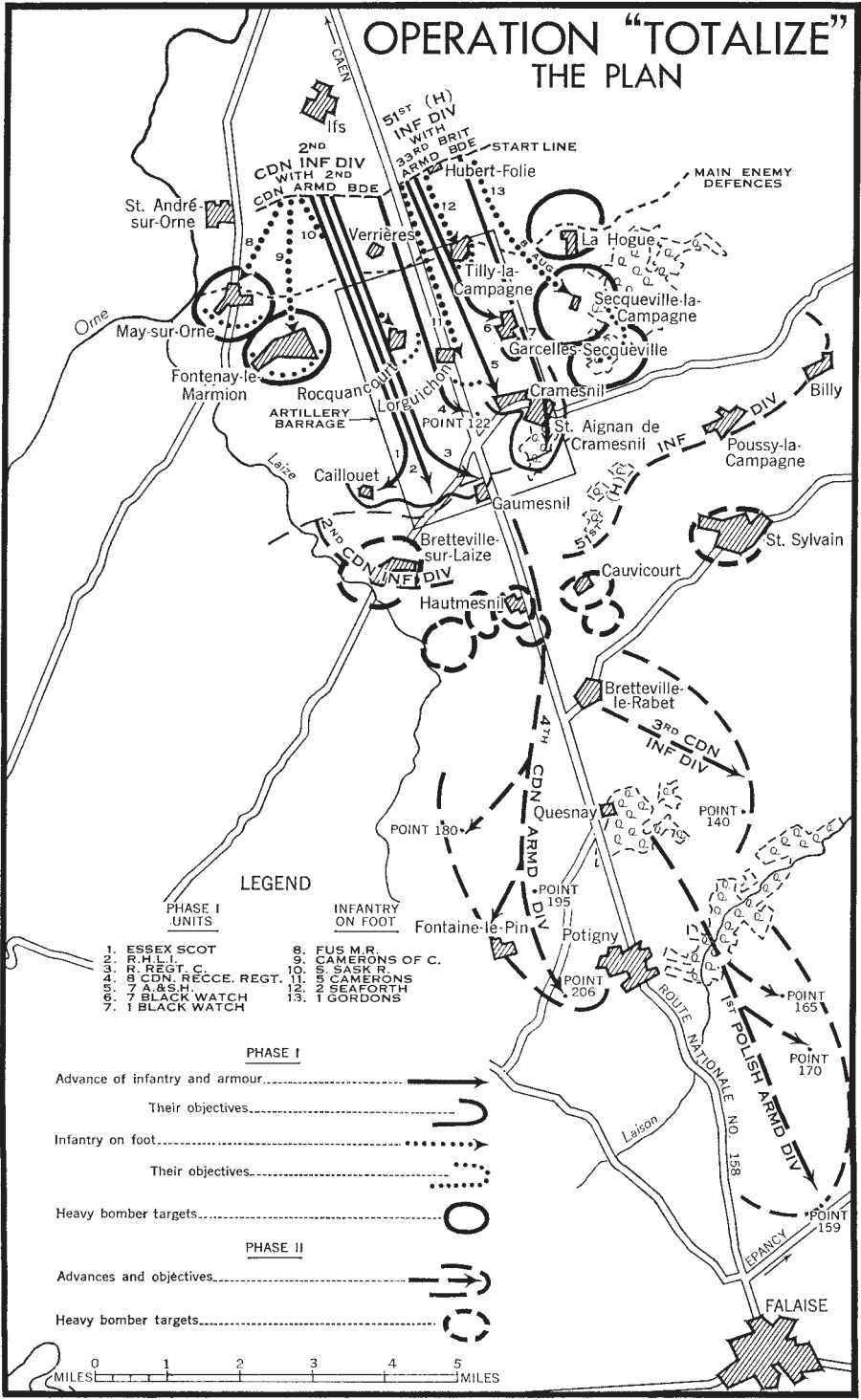
It requires practically the whole day bomber lift to effect (a) and if two defence zones are to be penetrated a pause with loss of speed and momentum must be accepted. It is considered that this may be avoided if the first zone is penetrated by infiltration at night but this can only be attempted with careful preparation by troops who are to do the operation.²⁶

Breaking through the frontline positions required the infantry to bypass somehow the strongpoints like May-sur-Orne and Tilly-la-Campagne which had repulsed repeated Canadian attacks with heavy casualties. Infiltration at night would sharply reduce the ability of German antitank gunners to disrupt the advance, but machine guns were not sufficiently handicapped in darkness because they were capable of indirect fire along fixed lines.²⁷

25. Reginald H. Roy, *1944: The Canadians in Normandy* (Ottawa: Macmillan, 1984), 149.

26. Appreciation for Operation “Totalize,” 1 August 1944, v. 2, CP.

27. G. G. Simonds, “The Attack,” *Canadian Defence Quarterly* 16 (October 1938–July 1939): 379–90.



The answer lay in an unorthodox method of attack. Simonds hinted in the appreciation that the attack would be made at night, supported by heavy bombers. The outline plan that he submitted with it called for the tanks to lead rather than support the infantry. To get the infantry through the front line, tracked, armoured personnel carriers would be used in combat for the first time. Simonds had seventy-six superfluous self-propelled 105-mm “Priests” stripped of their guns and converted to carry infantry. The “Kangaroos” were then issued to the assault brigades in the days preceding the operation.²⁸ In this fashion, the infantry would be able to move through the forward defensive line in relative safety, then dismount before taking the initial objectives.

Simonds’s notion of using air support to neutralize the enemy’s counter-armour forces was feasible, as Operation Cobra had shown, but only if German tanks and antitank guns were concentrated within the target areas. Apart from some shaking of the enemy’s morale, bombs that fell in open fields accomplished little. The bomber targets specified in the outline plan would be the strong-points preventing the infantry from cracking the forward defensive line and through which Simonds expected the counterattacks to be delivered: west of the road, the towns of May and Fontenay, which had been denied him since mid-July; and east of the road, a forest south of La Hogue which he suspected to be a tank harbour.²⁹ The Lancasters of Bomber Command were to “obliterate” these areas beginning at H-hour (the time the attack would commence), tentatively set for 2300 hours on 8 August. Between the two target areas lay, straddling the road, a narrow zone through which 2nd Corps’s armoured columns would advance.³⁰ Three years after the fact, Simonds gave a lecture during which he explained that he had “wanted [air support] in Phase I, to seal off the flanks of the very narrow corridor through which the armoured columns were to pass and, in particular, from enemy armour.”³¹ It therefore seems that Simonds was less concerned with actually destroying the enemy in the target areas than with preventing him from interfering with the advance.

When the appreciation was written, 1st SS and 9th SS held the line in front of 2nd Corps with the bulk of their tanks and self-propelled guns. Getting past the SS divisions in Phase I was expected to be the most difficult part of the operation. Bombing would, in theory, prevent them

28. Nicholson, *The Gunners of Canada*, 310.

29. David R. O’Keefe, personal correspondence based on “Bitter Harvest: A Case Study of Allied Operational Intelligence for Operation Spring, Normandy, July 25, 1944” (M.A. thesis, University of Ottawa, 1996).

30. Outline plan for Operation “Totalize,” v. 2, CP.

31. British Army of the Rhine (BAOR) Battlefield Tour Operation Totalize: 2 Canadian Corps Operations Astride the Road Caen-Falaise 7–8 August 1944 (September 1947), p. 33, 693.013 (D2), DHH.

from counterattacking into the flanks of Simonds's armoured columns and possibly disorganizing the entire operation. Once the initial objectives were secure, a firm base would be available through which the armoured divisions could continue the assault.

As the advance would move out of the effective range of artillery near the second German defensive line, Simonds now had to solve a puzzle that had been pondered since the Great War: how to maintain the momentum of the attack. His appreciation stated that

If all available air support is used for the first "break in" there will be nothing for the second except diminished gun support, unless a long pause is made with resultant loss of speed. If on the other hand the first "break in" is based upon limited air support (heavy night bombers) all available gun support and novelty of method, the heavy day bombers and medium bombers will be available for the second "break in," at a time that gun support begins to decrease and it should be possible to maintain a high tempo to the operations.³²

The outline plan, in the second phase, called for "[a]ll available medium bombers to lay [a] 'fragmentation carpet'" along the Falaise road near the second line and "[h]eavy day bombers (Fortresses)" to drop high explosive on Bretteville, Gouvix, Hautmesnil, and Cauvicourt. Another attack with fragmentation bombs was proposed over a wider area stretching further south, to neutralize German gun positions.³³ This concept applied the lessons of Goodwood, which had died out partly due to a lack of fire support in the latter stage of the operation. Bombing in Totalize would accompany the ground assaults and was arranged in progressive waves timed to move with the troops, almost like a creeping barrage of the Great War.

On 2 August Crerar sent a planning schedule to Brigadier C. C. Mann, First Canadian Army's Chief of Staff, ordering conferences to decide the technical matters related to the bombing attacks. Air force doctrine by this point in the campaign called for the RAF's Second Tactical Air Force (TAF) to work with 21st Army Group, constituting together a "combined force operating under separate commanders but in furtherance of one combined plan." This relationship was extended to subordinate formations, so Second Army's air support was provided by 83 Group RAF while 84 Group RAF was assigned to work with First Canadian Army. The final decision to commit air forces or put air plans into effect rested with the RAF, so requests by the army for support therefore went to its associated group, and those that were beyond the latter's resources, such as heavy bomber strikes, were submitted through

32. Appreciation for Operation "Totalize," 1 August 1944, v. 2, CP.

33. Outline plan for Operation "Totalize," v. 2, CP.

parallel channels: First Canadian Army to 21st Army Group, and 84 Group to Second TAF. Requests were then passed up from Army Group-TAF level to Allied Expeditionary Air Forces (AEAF) headquarters and its commander, Air Chief Marshal Sir Trafford Leigh-Mallory, who finally coordinated with Bomber Command or the Eighth Air Force.³⁴ The chain of command denied the armies a direct communications link to the strategic bombers providing support on any given occasion.³⁵ The potential negative consequences of this cumbersome arrangement had been revealed in Operation Cobra: if the tactical situation changed after the planes left the ground, or if there were any bombing errors, a flexible response while the planes were in the air would not be possible.

Because 84 Group's headquarters did not become operational until after the completion of Totalize, 83 Group was then coordinating air support for both Crerar and Dempsey.³⁶ Accordingly, Mann sent a tentative air plan over to 83 Group in preparation for an important conference on the air plan for Totalize. The meeting, held at First Canadian Army headquarters on 4 August, was attended by Crerar, his staff officers, and Simonds; C. A. Richardson, the Brigadier General Staff (Plans), 21st Army Group; Leigh-Mallory; Air Marshal Sir Arthur Coningham, commander of Second TAF; and the commanders of 83 and 84 Groups.³⁷ Absent were any representatives from Bomber Command or Eighth Air Force, which would not become involved until after plans were considered at the TAF level. Procedural matters for the bombing were explained to the army officers, and Leigh-Mallory explained that for technical reasons, "better accuracy can be obtained by using the heavy bombers of Bomber Command" on the targets to be hit with high explosive. Simonds's outline plan had called for "Fortresses," but this specification may simply have been due to a habit of thought because Eighth Air Force was considered the day-bombing specialist. The decisions taken at the conference concerning the timing of the attacks would force Simonds to adhere to a strict timetable. If it became necessary to alter the time of the air strikes, the army was told that "the RAF require 5 hours prior to H hour," which Simonds had set for 2300, "if a 24 hours postponement is required" on D-Day—then set for 8 August, but later advanced twenty-four hours. Five hours' notice was also required for a postponement of the bombing in Phase II, slated for 1400 on D plus 1. "NO change" was possible, therefore, "after 0900 hours." This require-

34. "Lecture to the Canadian Staff Course, Royal Military College, Kingston, Ont. 25 July, 1946," by C. C. Mann, v. 24, CP.

35. Dominick Graham, *The Price of Command: A Biography of General Guy Simonds* (Toronto: Stoddart, 1993), 186.

36. Mann lecture, v. 24, CP.

37. Memorandum of Points Arising at Conference Held At HQ First Canadian Army at 1700 B hrs 4 Aug 1944, dated 5 August 1944, v. 2, CP.

ment meant that despite any changes in the tactical situation on the ground after 0900, the second-phase bombing could not be aborted. Simonds would have to decide by that time whether or not to proceed with the air strike.

First Canadian Army's formal "Request for Air Support" listed the purpose of the first-phase bombing as the destruction of the "main enemy defensive localities and tank harbours on flanks of the attack." Targets 1 to 5 would be attacked with high explosive, which was effective against tanks and would also crater the ground, making it impassable to either tracked or wheeled vehicles. The ground advance would begin simultaneously with the air strikes, which were timed to last until H plus forty-five minutes. Bombing in the second phase was to be more complicated. Cratering was accepted for targets 6, 7, and 9, the "main centres of resistance in the enemy's defensive system on the flanks of the attack." H-hour was requested as 1400 on D plus 1, depending on the weather, with the bombing to be completed by H plus thirty minutes. Target 8, straddling the axis of advance, would have to be attacked by means of a "fragmentation carpet." The change in bomb type was due to two factors. Cratering was unacceptable because it would impede the advance, and as most of the German armour was expected to be in the forward positions, high explosive would not be required. Secondly, the purpose of the attack was the "neutralization of enemy weapons" and infantry expected to garrison the second defensive position. Fragmentation bombs would not knock out tanks, but they could be quite effective against infantry and artillery given the right circumstances, as Cobra had demonstrated. Fragmentation attacks were also requested against the enemy's "main gun areas" further south of the Bretteville-St. Sylvain line—targets 10, 11, and 12—"at the time that the break through is gaining momentum."³⁸

A target intelligence report outlined the probable enemy dispositions within the target areas listed in the Request for Air Support. Target 6, Bretteville-sur-Laize, was believed to be the headquarters for the western part of the defensive line, and two roads ran through the town to the *Fôret de Cinglais*, the main tank harbour in the area. Targets 7 (St. Sylvain), 8 (a cluster of areas astride the road), and 9 (Gouvix) contained infantry, machine guns, tanks, SPs, mortars, artillery, and antitank guns in various combinations and concentrations. The larger area of targets 10 through 12 showed few signs of occupation, but included "prepared inf[antry] def[ence]s" and "some bays suitable for reception of SP art[illery] or t[an]ks."³⁹ There was even more to the target areas than Canadian Intelligence knew. Bretteville-sur-Laize was another gun area,

38. Operation "Totalize"—Request for Air Support 4 August 1944, v. 9, CP.

39. Operation "Totalize" Part IV—Target Intelligence, 5 August 1944, v. 9, CP.

the quarry south of Hautmesnil (target 8) contained *Nebelwerfers*, and guns of Pickert's 3rd Flak Corps were located just to the north. Moreover, suspicions that a major gun position was contained in the area to the south, encompassing Bretteville-le-Rabet and Grainville-Longva, were justified.⁴⁰ If these defences could be neutralized by bombing, there would be very little standing between 2nd Corps and Falaise.

While preparations for Totalize proceeded, the Germans were busy making changes to their order of battle in the Caen area that would eventually cause significant modifications to Simonds's plan. By 2 August, 9th SS Panzer Division had withdrawn from the line and moved west. 2nd Corps Intelligence noted that its departure meant only 1st SS and 12th SS were left "to hold the hinge of Caen," but another formation was expected to move into the line, possibly from Bretteville-sur-Laize. The next day "[a] large column was . . . reported moving West on our Left flank," thereby confirming these suspicions.⁴¹ The *Hitlerjugend* also withdrew from the line on the night of 3/4 August, moving back into reserve north of Falaise. It was relieved by 272nd Infantry Division, which had assumed a position on the eastern flank of 1st SS.⁴²

By the early morning of 5 August, when it issued its summary for the 4th, First Canadian Army Intelligence was uncertain about the whereabouts of 12th SS but expected it to form a reserve somewhere in the area.⁴³ It then learned through Ultra—decrypted German signals provided by British intelligence—that 1st SS Panzer Division *Leibstandarte Adolf Hitler* was being relieved that day, although there was some uncertainty concerning the time at which this would occur and the strength of the elements still in the line.⁴⁴ Mann called Brigadier N. E. Rodger, 2nd Corps's Chief of Staff, at 1330 hours to tell him that the *Leibstandarte* "seemed to be pulling away on our front."⁴⁵ There was no information on where it was withdrawing to, however. At 1415 hours Crerar called Simonds to discuss the "thinning out" of the Germans' forward positions. The withdrawal of the SS divisions into reserve greatly increased the importance the generals attached to the Phase II bombing, and they agreed that in case the bombers could not provide support in both

40. BAOR Tour, Operation Totalize, Map 4.

41. 2nd Canadian Corps Intelligence Summaries #23 and #24 for 2 and 3 August 1944, v. 13711, RG 24, NAC.

42. English, *The Canadian Army*, 269.

43. First Canadian Army Intelligence Summary #36 for 4 August 1944, v. 13645, RG 24, NAC.

44. "Pulling out of division (Strong indications) began during night according to Flivo 1SS Panzer Division 0530hrs Aug 5," August 5 1040 hrs, DEFE 3/XL4795, Public Record Office, Kew, England (hereafter PRO); "Main body of 1 SS Panzer division relieved by 0350hrs Aug 5 according to Flivo I SS Panzer Korps," August 5 1137 hrs, DEFE 3/XL4803, PRO.

45. N. E. Rodger Diary, v. 10798, RG 24, NAC.

phases, the latter should take priority. Simonds also told Crerar that the timing of the air strikes in the second phase should not be changed. Crerar recorded in his telephone log that Simonds “want[ed] all interval.”⁴⁶

Mann had left that afternoon for AEAf headquarters in England, where a major conference was scheduled for 1800 hours to settle the details of 2nd Corps’s air support. While in England he received a signal from Crerar relating the main points of his discussion with Simonds about the changing enemy dispositions which concluded, “earlier time for H h[ou]r phase two NOT repeat NOT acceptable. May require later time on notice discussed.”⁴⁷ It is likely that Simonds wanted to delay the start of Phase II until his artillery could move up, following his tactical doctrine. Major-General George Kitching, commanding 4th Canadian Armoured Division, later said that 1400 was chosen as H-hour because “it was assumed that it would take several hours of daylight to organize the full scale assault by two divisions on the German defences in that area.”⁴⁸ Another possibility, although less likely, was that Simonds, expecting to launch that phase from a base just north of the second line and knowing that the Germans would react with violent counterattacks, hoped to catch them in the open where they would be destroyed by the bombing. Previous air attacks on strong-points like Tilly had accomplished little besides adding rubble to the defenders’ fortifications because the infantry always dug in. The fragmentation bombs Simonds wanted dropped on the areas of target eight would have an altogether different effect if they caught soldiers moving over open ground.

The conference at AEAf was attended by senior officers from the strategic air forces, 21st Army Group, and SHAEF. Mann outlined the plan for Totalize, which had been issued that day to the divisions concerned.⁴⁹ He explained the intention to break through two successive German defensive positions and exploit toward Falaise, beginning with a night attack astride the Caen-Falaise road supported by heavy bombing on the flanks. West of the road, 2nd Canadian Infantry Division was to break through the forward line—mounted in the converted Priests—led by the tanks of 2nd Canadian Armoured Brigade. East of the road, 51st Highland Division and 33rd British Armoured Brigade were assigned similar tasks. The armoured columns would advance to the infantry’s objectives where a base would be secured for the continuation of the attack in Phase II by 4th Canadian Armoured Division. As per the instructions

46. Telephone log GOC-in-C First Canadian Army, v. 2, CP. The log is not dated, but the entry was most likely for 5 August.

47. Signal from Main First Canadian Army to AEAf, 1515 hrs, 5 August 1944, v. 2, CP.

48. George Kitching memoir, 81/150, DHH.

49. 2 Canadian Corps Operation Instruction Number Four Operation “Totalize,” 5 August 1944, v. 10799, RG 24.

Mann had recently received in the signal from Crerar, he told the airmen that this phase “would not begin before 1400 hours, and would also be accompanied by preparatory bombing if possible.”⁵⁰

Mann’s “pitch” to the airmen for the proposed air support is detailed in the conference minutes. He said that “the area was heavily defended, and they had been trying for nearly two months unsuccessfully, to break through. Their own artillery could cover part of the area, but they had only 400 guns against 400/500 enemy guns.”⁵¹ Perhaps Mann felt compelled to overstate his case considering that he proceeded to request the bombing of the southernmost targets, 10 through 12, which intelligence reported as mostly unoccupied. Bombing empty space was not likely to be smiled upon by that particular audience, especially considering the ongoing complaints from the air forces about the army’s persistent failure to “cash in” on the opportunities the former had provided since the invasion began.⁵²

Nevertheless, First Canadian Army had earlier predicted that the likely German reaction to a breakthrough would be to move remaining guns and tanks into prepared positions in the rearward lines. Mann explained that the “choice of these areas [targets 10–12] was not always based on what there was there at the moment, but on what could be moved there during the battle. Some of the [other] aiming points were villages through which the Germans might move up [*sic*] their armour and guns.” He made certain to mention that the ground attack would commence at the same time as the air strikes on 7 August, in order to take full advantage of the bombardment. The second phase, he said, “would have to proceed even if air support were not available,” although he noted that the second defence zone was the stronger of the two, reflecting the changes in enemy dispositions over the previous two days.

Mann explained that cratering was acceptable on the flank targets (6, 7, and 9) in this phase, but that “fragmentation and a blast effect” was

50. Notes of a Conference Held in the War Room, HQ AEF at 1800 Hours on Saturday August 5th 1944, to Discuss Air Support for Operation “Totalise,” an Operation Planned by 1st Canadian Army in the Caen Sector, AIR 37/763, PRO.

51. *Ibid.*; English (*The Canadian Army*, 273) claims that 720 guns were available to support Totalize; Nicholson (*The Gunners of Canada*, 313) clarifies: 360 field and medium pieces could support the first phase, while 720 guns in total were available for the entire operation.

52. In mid-July at AEF, the Chief of Operations and Plans had discussed with the Senior Air Staff Officer a proposed recommendation to Leigh-Mallory that because the army was “failing to take advantage” of its successful close support and interdiction attacks, “there would appear little point in continuing the planned attacks on rail centres and rail and road communications. . . . He considered that the air effort expended might be better employed in a return to attacks on German Industries” and on V-1 flying bomb sites along the Channel coast. Bomber Command Operational Record Book, “Overlord Supplement No. 2,” AIR 24/206 mfm, DHH.

needed "over a wide area on the axis of advance." Because Bomber Command normally used high explosive rather than fragmentation bombs, the second-phase attacks were to be conducted simultaneously and jointly by the two air forces. The Eighth, which did use fragmentation bombs, would take on the centre targets. General Carl Spaatz, commanding the U.S. Strategic Air Forces in Europe, objected that his aiming points would be obscured by smoke created by the RAF's bombs. After further discussion Air Chief Marshal Sir Arthur Tedder, SHAEF's deputy commander,

suggested that in view of the difficulty of arranging the timing in order to allow the smoke to clear from the target between the bombing of Bomber Command and the 8th Air Force, and in view of the doubt whether cloud conditions would be suitable for high level bombing by 8th Air Force, it would be better for Bomber Command to take on all the bombing in the phase 2 area.

To avoid obscuring the central targets, the flanks would be bombed one hour before the army advanced. The centre would then be hit at H-hour, Bomber Command "ensuring the minimum of cratering effect." Tedder also said that the southernmost target areas (10, 11, 12) were too large to allow more than a "very thin effect," at which point Leigh-Mallory advised the employment of fighter-bombers to watch for the movement of guns into those areas. The conference thus wound up with decisions that the heavy bombing in both phases would be done by the RAF, while air support in the exploitation phase of the operation would be provided by Second TAF assisted by the Ninth U.S. Tactical Air Force, with additional reconnaissance supplied by fighter-bombers of Eighth Air Force.

While the conference proceeded, the changing enemy situation had prompted some contingency planning at First Canadian Army Headquarters. German movements obviously had Canadian Intelligence confused as to the enemy's order of battle. In the event of a general enemy withdrawal from his forward positions prior to the beginning of the operation, the first phase would commence with an assault on the second defensive position at the original H-hour, 2300 on 7 August. The air plan would go ahead, but with the Phase II targets substituted for targets 1 to 5.⁵³ Ultra intelligence and the recent move of 12th SS may have led the Canadian officers to engage in some wishful thinking, but the success or failure of Totalize depended on having the right kind of fire support on the right targets at the right time. Because the air plan was in large part

53. AEAF Conference Notes, AIR 37/763, PRO; Record of Tele conversation, Col GS and Brig Richardson, BGS Plans 21 Army Gp, on behalf of Brig Mann, C of S First Canadian Army, from Main Army HQ to HQ AEAF, approx. 2040 hrs, 5 August 1944, v. 2, CP.

crafted in order to counter the SS divisions, it was essential to locate them.

Canadian probing attacks near Tilly revealed that 1st SS was still there. The 2nd Corps Intelligence staff was convinced that both regiments of the *Leibstandarte* were holding the front near Verrières, and concluded in the summary for 5 August that “[i]n spite of reports to the contrary today the infantry of 1 SS has not fallen back.”⁵⁴ Beginning that same night, however, the division *was* relieved by 89th Infantry Division, which took over the entire area formerly held by 1st SS and 9th SS between the river Laize and the Caen-Mézidon railway. Army Intelligence reported that interrogation of prisoners of war from 1st SS that night had revealed information which “might lead one to suppose a major change was taking place.” Almost immediately upon taking over the line, a deserter from 89th Division arrived, saying “they had been told they were relieving an SS formation. He thought that 1 SS Pz Division had withdrawn to BRETTEVILLE SUR LAIZE.”⁵⁵

Such a move would profoundly alter the complexion of the operation. The 89th was considered a low-quality “pocket division,” made up mostly of men under eighteen or over forty, including a large proportion of non-Germans. It had just arrived from Norway, had not yet seen combat, and was not expected to be capable of strong opposition.⁵⁶ Instead of the stiff resistance that was expected in Phase I, which provided the rationale for the night bombing in the first place, 2nd Corps now faced one low-quality infantry division that had taken over the sector previously defended by two panzer divisions. The trade-off was that Simonds would now have to confront both 1st SS and 12th SS in the battle to pierce the second line. The Phase II bombing thus took on an increased significance.

By the next morning Simonds had learned of the relief from Army Intelligence. At 1000 hours on 6 August he held a conference with his divisional commanders to inform them of critical changes that were to be made to the original Operation Instruction in light of the new information. He was certain by then that the SS divisions had been relieved, but was still unsure about their exact locations. Both Army and Corps Intelligence believed that the *Leibstandarte* had stepped back to the Bretteville-sur-Laize area.⁵⁷ As for the *Hitlerjugend*, a directive Crerar

54. 2nd Canadian Corps Intelligence Summary #25 for 5 August 1944, 112.3M1009 (D114), DHH; Michael Reynolds, *Steel Inferno: 1st SS Panzer Corps in Normandy* (New York: Dell, 1997), 250.

55. First Canadian Army Intelligence Summary #38 for 6 August 1944, v. 13645, RG 24, NAC.

56. Appreciation of probable enemy reaction to Operation Totalize prepared by Lt.-Col. P. E. R. Wright, 7 August 1944, v. 2, CP.

57. 2nd Canadian Corps Intelligence Summary #26 for 6 August 1944, v. 13711, RG 24, NAC; First Canadian Army Intelligence Summary #38 for 6 August 1944.

issued to his corps commanders that day appreciated that it was now concentrated to the east of the Totalize battlefield. It could be expected to counterattack “in some strength” and with determination, so the task of Crocker’s 1st British Corps was to secure its own front and thus guard the left flank of 2nd Canadian Corps.⁵⁸

Simonds decided, based on the new enemy dispositions, to alter his plan for Phase II. The original plan had been for 4th Division to breach the second line and advance on the west side of the road while 3rd Division secured the flanks and formed a firm base just behind. The Poles were then to continue the advance on the east side of the road in Phase III, in order to capture the high ground north of Falaise. In the amended plan, Phase III was eliminated. Now both armoured divisions would advance simultaneously in Phase II, straight through to their final objectives, while 2nd Infantry and 51st Highland secured the right and left flanks and formed a base on the Bretteville-sur-Laize line. Following the Polish Armoured Division would be 3rd Division, which would then take over the area extending southeast from Hautmesnil through Bretteville-le-Rabet to the high ground at Point 140.⁵⁹

Simonds explained the change of plan to Crerar later that day, observing that the “thickening up” of SS troops on the second German line “necessitates a widening of the frontage and increase in the weight of attack in the second phase.”⁶⁰ Kitching and Major-General Stanislas Maczek, commanding the Polish Armoured Division, saw the matter differently. Kitching later complained that while 3rd Division was initially to “‘make the hole’ through which I would pass,” the change, made “only twenty-four hours before the attack,” meant that now both armoured divisions would have “to ‘make the hole’ ourselves.” Equally problematic, within the wider corps area woods and the river Laize would restrict each division to a “very narrow front.” This would limit the flexibility of the tanks to manoeuvre and still allow the enemy to concentrate his defences.⁶¹ Historian John A. English notes, siding with Simonds, that to overcome the “almost invisible German defense in depth . . . one had to attack in depth.” This was “the conundrum of the broad front approach.”⁶² Furthermore, Simonds’s options were limited. As the goal was Falaise, he had few alternative routes from which to choose. First Canadian Army’s Plans Section had considered, in early August, the possibility of an attack that would outflank the German defences to the east

58. GOC-in-C 1-0-4, 6 August 1944, v. 2, CP.

59. Operation “Totalize,” amendment to Operation Instruction Number Four, 6 August 1944, v. 10799, RG 24.

60. GOC 8-3, Simonds to Crerar 6 August 1944, GOC 8-3, v. 2, CP.

61. George Kitching, *Mud and Green Fields: the Memoirs of Major-General George Kitching* (Langley, B.C.: Battleline, 1986), 210.

62. English, *The Canadian Army*, 273.

before capturing Falaise. This option was constrained by even narrower frontages and a lack of roads, and was rejected.⁶³ It is difficult to imagine what other course of action Simonds could thus have chosen.

At 1213 hours on 6 August, Mann contacted Crerar from Bomber Command headquarters in England, where he had gone to finalize the arrangements made the previous evening. Simonds was present at Army headquarters and took the opportunity to discuss the expected air support. Despite the previous day's contingency planning, it now seemed that the "thinning out" of the forward line was not an indication of an impending general withdrawal. Simonds told Mann that the enemy showed "every intention to hold his positions opposite 2 Cdn Corps [sic] front," and reiterated the importance of the second-phase bombing. Simonds's later memo to Crerar reasoned that the "thickening up" of the second line meant that 2nd Corps would likely meet "stronger resistance than originally anticipated," but because the air plan had, in any case, been formulated to assist "a second 'break-through' operation," no change in the air plan was required.⁶⁴

That plan was, for the most part, finalized in two documents issued by AEF on 6 August and 2nd Corps in the early morning of the seventh. Both documents reflect the decisions taken at the conference of 5 August, though there are some interesting discrepancies in the way the army and the air force each articulated the purpose and the procedures of the air strikes. The AEF plan made no distinction between the purposes of the bombing in Phases I and II. In both, it was to "[d]estroy enemy installations and forces" in the target areas. Cratering was "acceptable" in all first-phase areas, and "desired" in all second-phase areas except target 8. H-hour for Phase II would "not be earlier than 1400 hours 8 August."⁶⁵ Simonds's headquarters, meanwhile, specified that "[c]ratering has been accepted" in the initial attack on 7 August, "with a view to isolating the corridor through which the armour and infantry are to advance." Contrary to what the AEF planned for targets 6 through 9, "[c]ratering has NOT been accepted in these areas."⁶⁶ The latter attack, furthermore, was to be made at 1300 hours. The cause of confusion over the timing was a difference in usage of the term "H-hour." The army referred to H-hour as the time at which leading troops would cross the startline for the attack, while the air force used the term to

63. War Diary, Plans Section, HQ First Canadian Army (no date), v. 13607, RG 24, NAC.

64. Memo of Telephone Conversation Between C of S First Canadian Army, Speaking from HQ Bomber Command and Comd First Canadian Army, Commencing at 1213 Hours 6 August 1944, v. 2, CP.

65. AEF/TS.13165/Air, 6 August 1944, v. 2, CP.

66. Op "Totalize"-Air Programme, 7 August 1944, v. 10820, RG 24.

indicate the time that the first bomb was to be dropped.⁶⁷ These inconsistencies indicate a continuing confusion in communications between the army and air force. In spite of all the meetings and memos, the two did not think of the tactical support problem in the same terms.

As it turned out, Bomber Command would not be responsible if cratering occurred in the wrong target areas. At some point between 1100 and 1535 hours on 7 August, it was decided that Eighth Air Force would make the Phase II attacks after all, and would hit the targets on the flanks where cratering was acceptable as well as those in the centre where it was not. A final conference to confirm the arrangements for the operation was held that morning, attended by representatives from First Canadian Army, 21st Army Group, 83 Group, and 84 Group. It confirmed H-hour on 8 August as 1400, subject to change by 2nd Corps upon five hours' advance notice to Bomber Command.⁶⁸ Then at 1535 hours, First Canadian Army received word through 21st Army Group that H-hour on the following day was 1300, but the bombing of the flank targets (6 and 7) would "PROBABLY COMMENCE BEFORE H HOUR." The remaining targets would be hit at H-hour, and all bombing was to be completed by H plus forty-five minutes. The reason for bombing earlier on 8 August was a meteorological forecast predicting that after 1300 hours the weather would be unsuitable. If this late change regarding timings caused Simonds and his staff to scramble, it has been recorded nowhere. The message concluded that "detailed arrangements" would be completed by First Canadian Army and *Eighth Air Force*, through 83 Group.⁶⁹ An RAF draft narrative explains the reason for the latter change:

The settled fair weather was marked by an absence of wind which resulted in persistent morning fogs. This entailed the risk of R.A.F. Bomber Command's forces having to land away from their bases after a night operation and thus it would be impossible to guarantee a sufficiently strong force for the second phase of the bombing operations on the following day.⁷⁰

More major alterations, this time to the air plan rather than the ground plan, were thus being made virtually at the last minute. The change in timings and air forces would have unfortunate consequences the next day.

67. First Canadian Army Op Instr Number 12, Maj Air Plan-Op Totalize, 7 August 1944, v. 2, CP.

68. Minutes of Conference 1100B hrs 7 August 1944, v. 2, CP.

69. AEAf to First Canadian Army, 1535 hrs, 7 August 1944, v. 2, CP.

70. "The Liberation of North-West Europe Volume IV: The Break-Out and the Advance to the Lower Rhine, 12 June to 30 September, 1944," p. 92, RAF draft narrative, Air Ministry Historical Branch, 86/285, DHH.

While the final arrangements for the air support were being made, German dispositions were again changing. There was considerable uncertainty as to the status of the SS divisions during the two days immediately preceding the start of Operation Totalize. By the early morning hours of 7 August, Army Intelligence had confirmed the relief of 1st SS, but speculated that it “may have left behind some tanks to bolster the defence by a weak infantry division.” The two divisions were still believed to constitute part of a counterattack reserve on the Caen front, with one or two independent battalions of Tiger tanks possibly providing additional support. The summary for 6 August stated that during the entire campaign any significant reserves collected had always been sent to plug holes in the German line, and an unstable flank now existed south of Vire as a result of the Cobra breakout, so there could be no certainty as to how the enemy would use his reserve.⁷¹

Corps Intelligence, meanwhile, reported the westward shift of “considerable portions” of both divisions to “meet the threat across the ORNE” posed by Second Army’s bridgehead to the north of Thury-Harcourt. Although Canadian Intelligence did not realise it, the *Hitlerjugend* had in fact been split into three battle groups, two of which had been sent to check Second Army in the Vire and Grimbosq areas while the third alone remained on the Canadian front just south of Bretteville-sur-Laize.⁷² “Large elements” of 1st SS had also been identified further west near the town of Vassy, about fourteen miles west of Falaise.⁷³

The picture cleared somewhat at 1320 hours on the seventh with an appreciation of enemy strength and dispositions produced by Lieutenant-Colonel P. E. R. Wright, Crerar’s chief intelligence officer, which considered the probable German reaction to Totalize. He did not expect 89th Division to be capable of strong resistance if “subjected to extraordinary bombardment” or its positions were penetrated. Though still convinced that 12th SS was in the Mézidon-Valmeray area to the east, Wright reported that elements were known to be as far west as Bretteville-sur-Laize. The division was assumed to have about eighty tanks, including thirty-five Panthers. The only other troops in the area were probably “some [tanks] of 1 SS Pz Regt which may have been left, either to give additional [strength] to the [forward defensive] line or to provide an [armoured reserve],” and twenty-five Tiger tanks of the 101st Heavy Tank Battalion. In fact, 12th SS had available only about thirty-nine of its own Panzer IVs and the eight or so Tigers of the 101st with which to

71. First Canadian Army Intelligence Summary #38 for 6 August 1944, v. 13645, RG 24, NAC.

72. Hubert Meyer, *The History of the 12. SS-Panzerdivision “Hitlerjugend,”* trans. H. Harri Henschler (Winnipeg: J. J. Fedorowicz, 1994), 170–71.

73. 2nd Canadian Corps Intelligence Summary #27 for 7 August 1944, v. 13711, RG 24, NAC.

meet the Canadian assault on the morning of 8 August.⁷⁴ Wright recognised that the Germans did not have adequate strength to stabilise the situation on their western flank, and “[f]or that reason 1 SS Pz Div may be assumed to have gone there [south of Vire] and its place taken by 12 SS Pz Div with responsibility extended over a wider area.” Wright evaluated the reserve—12th SS—as “insufficient” either to maintain the front line or to stabilise the second. This judgment would prove the only significant error in the appreciation.⁷⁵

Although Wright underestimated the abilities of 89th and 12th SS Divisions, the importance of the appreciation lay in the provision for Simonds of a fairly accurate description of the forces that he could expect to oppose the advance of 2nd Corps. By 0100 hours on the eighth, Army Intelligence had further learned that “several elements” of 1st SS, including artillery, had been identified in the Mortain area. While it could not be assumed that the entire division had left, most of it was “out of the way except for parties likely to be left to give strength and encouragement” to 89th Division. That left “only 12 SS known to be in the area.”⁷⁶

The *Leibstandarte* was no longer on the Caen front, as Wright had surmised. It had been gone for about twenty-four hours by the time his appreciation was prepared. The relief of 1st SS had been effected in order to free it up to take part in Operation Lüttich, Hitler’s desperate counterattack against the American breakout on the western flank near the town of Mortain. The attack began shortly after midnight 6/7 August, and was quickly contained by the Americans.⁷⁷ By the time this information filtered through to Montgomery, Crerar, and Simonds, the impending Canadian operation had taken on immensely greater importance. The transfer west of the German reserve weakened the enemy’s defences on the Canadian front, and Second Army’s gains along the Orne threatened “the flank and rear” of the German positions opposite First Canadian Army. When Lüttich was stopped and General George S. Patton’s Third U.S. Army continued to sweep around the German forces to the south and east, the famous “Falaise Pocket” was formed, in which the remnants of the German Seventh Army were trapped. Panzer Group West—now renamed Fifth Panzer Army—at the eastern, open end of the pocket also faced envelopment if the Canadians could close the gap by taking Falaise and blocking the roads leading out of the pocket to the east. The Germans had made a huge strategic gamble by committing the bulk of their available reserve at Mortain, and Montgomery was now pre-

74. Meyer, *History of the 12. SS-Panzerdivision*, 171.

75. Appreciation of Enemy Strength and Dispositions, 7 August 1944, v. 2, CP.

76. First Canadian Army Intelligence Summary #39 for 7 August 1944, v. 13645, RG 24, NAC.

77. Hans Speidel, *We Defended Normandy* (London: Herbert Jenkins, 1951), 139.

sented with the opportunity to “bag” all of the German forces in Normandy if the envelopment could be completed by a thrust to Falaise.

At 2300 hours on 7 August, Bomber Command executed the first ever tactical support mission by heavy bombers at night. Five minutes earlier, the twenty-five-pounder field guns of 2nd Canadian Infantry Division began firing green flare shells on May-sur-Orne and Fontenay-le-Marmion. East of the Falaise road, 51st Highland’s divisional artillery fired red flares on La Hogue, Secqueville-la-Campagne, and the wood to the immediate south of the latter town. Mosquito Pathfinders led the bomber stream to the target areas, where 1,019 Lancasters and Halifaxes began to drop 3,460 tons of high explosive.⁷⁸ The weather was relatively clear, but a lack of wind meant that the smoke and dust from the explosions dispersed slowly. The target markers thus became obscured and, consequently, only 641 aircraft bombed their targets. Despite some claims exaggerating the positive effects of the air strike, 21st Army Group’s No. 2 Operational Research Section later reported that the bombing was inaccurate and hit relatively little of importance.⁷⁹

The artillery, meanwhile, opened up with a thunderous roar at 2343 hours, lending further support to the men of 2nd Canadian Corps. Once the bombing was completed, 2nd Division’s twenty-five-pounders fired green flare shells onto Point 122, the high ground near Cramenil, to mark the interdivisional boundary. Radio beams, searchlights providing “artificial moonlight,” and Bofors antiaircraft guns firing tracer bullets were used to maintain direction during the night attack.⁸⁰ The assault forces had been marshalled into seven armoured columns, each with its own objective, astride the Caen-Falaise road. A “gapping force” composed of tanks of the Sherbrooke Fusiliers and an assortment of navigational tanks, engineers’ bulldozers, and mine-clearing “Crabs” mounting large flails led the way. Following close behind was a “fortress force” of three squadrons of the Fort Garry Horse that would secure the infantry’s dispersal area. At that point the columns would separate and the “assault forces,” made up of carrier-borne battalions of 4th Canadian Infantry Brigade, would take the first-phase objectives. Self-propelled guns of the

78. “Night Operations by Bomber Command in Close Support of the Army. Caen Area, 7/8th August, 1944,” Tactical Bulletin No. 42, 14 August 1944, AIR 15/721, DHH.

79. Current Reports from Overseas #57, 30 September 1944, 87/243, DHH; Tactical Bulletin No. 42, AIR 15/721, DHH; 21 Army Group No. 2 ORS Report No. 8, “Operation ‘Totalise’ RAF Heavy Bombing on the night of 7/8th August 1944,” reproduced in Copp, ed., *Montgomery’s Scientists*.

80. Op “Totalize”-Op messages, v. 10635, RG 24, NAC; Brereton Greenhous et al., *The Crucible of War, 1939–1945: The Official History of the Royal Canadian Air Force*, (Toronto: University of Toronto Press, 1994), 3:814; Nicholson, *The Gunners of Canada*, 314.

6th Antitank Regiment accompanied the columns to support the attackers on the objectives while the infantry's own six-pounders were brought forward. The battalions of 6th Canadian Infantry Brigade were to follow behind on foot to mop up the areas bypassed by the armoured columns. Similar tasks were assigned to 33rd British Armoured Brigade and 51st Highland Division east of the road.⁸¹

The four columns on the "Canadian" side of the road had formed up near the town of Ifs, just southwest of Caen, during the afternoon of 7 August. They crossed the startline at 2330 hours. The difficulty of keeping direction in the dark during the "Gallop" to the dispersal areas was aggravated by the great dust clouds raised by the bombing and the mass of moving vehicles. The Germans added smoke shells to the dust. Visibility was reduced to zero, and some of the tanks collided with or fired on other Allied vehicles. Near Rocquancourt the three right-hand columns lost their course, and the confusion was increased when a German 88-mm gun opened fire, causing heavy casualties to the vehicles of the Essex Scottish on the right flank. In the centre, the Royal Hamilton Light Infantry (RHLI) managed to sort itself out and was approaching its objective by 0400 hours. By 0800 hours the battalion had dug in just north of a quarry where the Germans were established with supporting armour, and assisted by the Sherbrooke tanks, repelled a counterattack from "between eight and ten SP guns and [tanks] with some [infantry]." The RHLI spent most of the day consolidating its position, and not until 1800 hours did a patrol report the objective clear of the enemy.⁸² The Royal Regiment of Canada took its objective near Gaumesnil, and was then also occupied in fighting off German counterattacks. The 8th Reconnaissance Regiment, meanwhile, was initially stopped short of Point 122 on the left, the anchor of the first German line, but the high ground was subsequently taken with help from some Fort Garry tanks. The 8th Recce and a squadron of Sherbrooke tanks then moved to assist the Essex Scottish, which had come up short of Caillouet. That town was captured around noon.⁸³ Brigadier Wyman of 2nd Canadian Armoured Brigade had signalled at 0615 hours "that the [objective] area was securely held by our forces and that the situation appeared to be entirely suitable for further ops to begin."⁸⁴

81. "Op 'Totalize': An Account of Ops by 2 Canadian Armd Bde in France 5 to 8 Aug 44," v. 10581, RG 24, NAC; Stacey, *The Victory Campaign*, 216–19.

82. Acct of attack on Pt. 46 (Op Totalize) 8 August 1944 by RHLI Given by Lieut. Col. G. M. MacLachlan-10 August 1944, 145.2R14011 (D4), DHH.

83. War Diary, "C" Squadron, Fort Garry Horse (10th Canadian Armoured Regt.), Monday, 7 August 1944; Stacey, *The Victory Campaign*, 219; BAOR Tour, Operation Totalize, p. 25.

84. Op "Totalize," An Account of Ops by 2 Canadian Armd Bde in France 5 to 8 August 1944, v. 10581, RG 24, NAC.

Wyman's report was premature, but the columns had nevertheless succeeded in penetrating the German lines and were nearing the objectives of the first phase by early morning. East of the road, 51st Highland and 33rd British Armoured Brigade were having a similar time. After some initial delay due to enemy fire, the right-hand column took Cramesnil by early morning. On the left, St. Aignan de Cramesnil and the wood to the south were captured with light casualties.⁸⁵ The assault had thoroughly disorganized the 89th Division and broken the forward German line. Some historians have strongly argued that the way was clear on both sides of the Falaise road for the second phase to begin.⁸⁶

The formation that was to lead the way for 4th Armoured Division was far from ready, however. The assignment had been given to "Halpenny Force," a battle group composed of the Canadian Grenadier Guards' tanks and infantry of the Lake Superior Regiment. The spearhead of the force was 1 Squadron of the Guards, led by Major E. A. C. Amy. It had been ordered forward from its concentration area just south of Caen, beginning at 0030 hours, to the forming-up place (FUP) recently vacated by the armoured columns that made the Phase I attack. From there it would be marshalled for the advance to its startline for Phase II, near the road running from Bretteville-sur-Laize to St. Aignan. An account given by Amy recalled the chaos that dominated an orders group preceeding the move forward, in which the noise from the aircraft overhead and nearby artillery drowned out Lieutenant-Colonel W. W. Halpenny of the Guards, and the lights had been doused so as not to arouse the interest of the bombers. The move to the marshalling area was further complicated by unfamiliarity with the ground and a lack of adequate time to brief tank crews. This, in turn, led to "much confusion over timings for Phase 2. Our CO told me, 1 Sqn, to be ready to cross the start line at first light (approx 0500 hrs) depending upon the success of Phase 1."⁸⁷ The disarray within Halpenny Force only added to the inherent difficulties of coordinating such a complex operation.

Amy's advance to the startline was delayed by the ongoing battle in the forward areas bypassed by the armoured columns. Although the Germans' forward positions had been penetrated and 89th Division thoroughly disorganized by the stunning success of Phase I, the defenders continued to fight in scattered groups and held on to key towns anchoring the line. Amy was subsequently "told we were not to proceed to our start line until 2 Div declared Roquancourt [*sic*] clear which we under-

85. Current Reports from Overseas #57, 30 September 1944, 87/243, DHH.

86. Jarymowycz, "Canadian Armour in Normandy," 23; English, *The Canadian Army*, 274.

87. Account of Operation Totalize by E. A. C. Amy of the Canadian Grenadier Guards, 20 February 1993 (hereafter, Amy manuscript). Personal copy.

stood would be soon.”⁸⁸ Although the South Saskatchewan Regiment had entered the town at 0045 hours, the area had not yet been made secure enough to permit an orderly advance by 4th Division.⁸⁹ Not until 1224 hours did 4th Armoured Brigade report “ROCQUANCOURT now clear” and tell the tanks to “get cracking.”⁹⁰ The helter-skelter move to the startline continued. Elsewhere, repeated attacks by 51st Highland had been necessary to capture Tilly-la-Campagne, which did not fall until 0700 hours. The Queen’s Own Cameron Highlanders of Canada fighting for Fontenay, meanwhile, were in trouble. Under heavy shellfire, the battalion “was unable to clear the southern part of the village and had had its main axis [to its rear] cut. Battalion HQ was hit, and for the second time in twelve hours the battalion lost its commanding officer.”⁹¹ Fontenay was not cleared until the afternoon, after the South Saskatchewan Regiment and a squadron of 1st Hussars tanks fought their way across Verrières Ridge and linked up with the Camerons. May had been equally difficult and costly to capture. The Fusiliers Mont-Royal had been subjected to heavy fire and required the assistance of “Crocodiles,” Churchill tanks fitted with flamethrowers, before succeeding around 1600 hours.⁹²

While 2nd Corps did not have to deal with the armoured counterattacks from the areas around May, Fontenay, and Secqueville that Simonds had expected when 1st SS held the front—and for which he had planned the first-phase bomber strikes—89th Division had not disintegrated as soon as H-hour arrived on 7 August. A new front line had resulted from the successful armoured advance, but throughout the eighth stubborn resistance and counterattacks had to be overcome all over the Totalize battlefield, in May, Fontenay, Rocquancourt, St. Aignan, and at Point 122 and the quarry confronting the RHLL. It was through the midst of the ongoing struggle that the 4th Canadian and Polish Armoured Divisions had to travel just to reach the startlines for their own attacks. The inclusion of the Poles in the second phase also meant that an additional division would have to move up through an area already crowded with Canadian infantry, artillery, armour, and other services and supplies.

Both divisions were slow in moving forward because their lines of approach were under enemy fire. Maczek claimed that continuing opposition on 51st Highland’s objectives required his division to assist in

88. Ibid.

89. “Canadian Participation in the Operations in North-West Europe, 1944, Part III: Canadian operations, 1–23 August,” Historical Section, Canadian Military Headquarters (14 January 1947), p. 9, Report No. 169, DHH.

90. Kitching memoir, 81/150, DHH.

91. BAOR Tour, Operation Totalize, p. 25.

92. Stacey, *The Victory Campaign*, 219–20.

mopping-up before it could proceed with its own tasks.⁹³ With the Poles' consequent delay in moving up, Amy's spearhead faced an open left flank during its move forward and a decided lack of knowledge about enemy dispositions. Adding to his discomfort, the leading tanks were being shelled. The advance was, understandably, cautious. Far from being ready at the startline by 0500 hours, Amy was again told to "get crack-ing . . . ignore shelling" at 1230 by an impatient 4th Armoured Brigade.⁹⁴ Amy's fire support was not ready either. Three field regiments, after ceasing fire in the early hours of the eighth in order to move the guns up in support of the second-phase advance, "found their potential positions being systematically shelled from three sides and under mortar fire from surrounded pockets of resistance . . . recon parties and their waiting guns frequently became unenthusiastic spectators of infantry and tank battles still going on in their prospective areas."⁹⁵ Behind the frontline, additional units continued to move into the area. Traffic jams were inevitable and added to the delays in moving forward.

Meanwhile, the rumble of four-engine bombers again filled the air south of Caen. The Flying Fortresses of Eighth Air Force made their runs against the second German line between 1226 and 1355 hours. Flak disrupted the bomber formations on the run-in to the targets, and the "Mighty Eighth" claimed that neither the target marker shells nor the flares dropped by pathfinders were visible from the air. As a result, accuracy was poor and the lack of wind allowed smoke and dust to obscure the targets, making the problem worse. Only 497 Fortresses bombed, and of the 55 tactical groups that made the attack, "no more than 16 . . . bombed in or adjacent to the target areas."⁹⁶

The attack seems to have accomplished little—Gouvix was not bombed at all—and Kitching judged that it "had not been as effective as we had hoped, causing very few casualties amongst the Germans."⁹⁷ Two or three of the twelve-plane groups bombed First Canadian Army positions just south of Caen, however, and the effect on the soldiers in the packed rear areas was disastrous. Allied casualties totalled over three hundred, including sixty-five killed. The 7th Medium Regiment, Royal Canadian Artillery, was firing on the Germans when it was bombed near Cormelles. The gunners lost eleven killed and eighteen wounded when three of their guns suffered direct hits, and the adjacent ammunition

93. Aect of PAD in Op Totalize, v. 10942, RG 24, NAC.

94. Kitching memoir, 81/150, DHH.

95. Nicholson, *The Gunners of Canada*, 317.

96. U.S. Air Force Historical Study No. 88, "The Employment of Strategic Bombers in a Tactical Role, 1941–1951" (Maxwell, Ala.: Air University, 1953), p. 81, 81/881 mfm, DHH.

97. Kitching, *Mud and Green Fields*, 212.

dump exploded.⁹⁸ Also hit nearby was the 4th Medium Regiment, which had moved to an assembly area in Vaucelles preparatory to taking up new gun positions at Hubert Folie in support of the Polish Armoured Division. Aside from devastating the supporting medium artillery regiments, the bombing inflicted casualties on the Fort Garry Horse, Régiment de la Chaudière, 1st Hussars, the Polish Armoured Division, the headquarters of both 3rd Division and 2nd Armoured Brigade, and the 9th British Army Group Royal Artillery.⁹⁹

By 1330 hours reports of the bombing were coming in to 2nd Corps Headquarters. A message had to be passed through the First Canadian Army-83 Group control centre before Eighth Air Force could be contacted to stop the bombing. Without a direct link to the planes in the air, nothing could be done in time. The fragmentation bombs had devastating effects because, as Kitching later explained, "several thousand vehicles, guns and tanks and some 50,000 soldiers" had moved "into an area approx 2 miles by 4 miles." The troops, caught in the open, presented extremely vulnerable targets to the errant bombs.¹⁰⁰ At 1700 hours, Simonds spoke to Mann from his command post and delivered an optimistic and undoubtedly erroneous evaluation of the bombing errors. He said that his corps's "fighting efficiency has NOT been affected by inaccurate bombing by 8 USAAF. . . . One [ammunition] dump destroyed but is being replaced. . . . [E]verything is in hand."¹⁰¹ On the contrary, it must be re-emphasised that the operational plan depended on the availability of overwhelming fire support. The Phase II bombing attack failed to blast a path through the Germans' secondary line, and the short drop had taken a serious toll on the artillery units that were tasked to support the armoured divisions assaulting that line. The mishap thus deprived 2nd Corps of crucial organic fire support, the absence of which may help explain the slow progress made throughout the remainder of the day.

While the short drop was perhaps not decisive, it certainly marks the symbolic turning point in the operation, after which little went right. Following the first-phase breakthrough, *Oberführer* Kurt Meyer, commanding the *Hitlerjugend*, redistributed his battle groups to stem the Canadian assault. He ordered a counterattack by *Kampfgruppe* Waldmuller, composed of infantry and 39 Mark IV tanks, which stopped the Polish advance cold south of St. Aignan, while the lead troops of 4th Canadian Armoured Division were brought to a halt north of Langanerie by mines, enemy tanks, and antitank guns.¹⁰² A breakthrough of a

98. Will R. Bird, *North Shore (New Brunswick) Regiment* (n.p., 1963), 359.

99. English, *The Canadian Army*, 278; message log, vol. 10818, RG 24, NAC.

100. Kitching memoir, 81/150, DHH.

101. First Canadian Army MAIN Ops Log 8 August 1944, v. 13624, RG 24, NAC.

102. Meyer, *History of the 12. SS-Panzerdivision*, 172–76; Reynolds, *Steel Inferno*, 253, 288; Amy manuscript.



sort did occur the next day when Worthington Force, a mixed battle group of British Columbia Regiment tanks and infantry of the Algonquin Regiment, penetrated to Point 140 south of Soignolles. Unfortunately, the force's objective was Point 195, on the other side of the Caen-Falaise road. A navigational error thus left Worthington Force lost and cut off from reinforcements, and it was annihilated in a day-long siege.¹⁰³ Point 195 was captured that night by the Argyll and Sutherland Highlanders of Canada, but the operation was called off following an abortive assault on Quesnay Wood by the Queen's Own Rifles and the North Shore Regiment, the latter of which had been effectively reduced to three companies instead of four as a result of the bombing mishap.¹⁰⁴

The failure of Totalize constituted a missed opportunity to encircle the Germans in the developing Falaise Pocket, and the fighting in Normandy would continue until 21 August. What went wrong? Critics have insisted that Simonds's plan to capitalize on a historic opportunity was fundamentally flawed because it was too complicated and sought to impose a rigid schedule upon a fluid tactical situation. Would a more elegant alternative to the use of brute force in the form of heavy bombers have been capable of producing a breakthrough? It should be remembered that Simonds's first attempt to break the German line at Breteville-sur-Laize,¹⁰⁵ Operation Spring, had been a bloody disaster which failed to penetrate even the *forward* line on Verrières Ridge. In fact, Totalize was only one of a number of 21st Army Group battles in the Caen sector that exhibited similar characteristics.¹⁰⁶ John A. English noted that increasing firepower had made bold tank charges obsolescent: "In Russia and elsewhere," he wrote, "*Blitzkrieg* foundered before oppo-

103. The destruction of Worthington Force on Point 140 has been described in detail by Stacey, Hubert Meyer, Roy, Reynolds, Jarymowycz, and English, and in virtually every account of Operation Totalize.

104. Stacey, *The Victory Campaign*, 231.

105. David O'Keefe, draft copy of "Bitter Harvest: A Case Study of Allied Operational Intelligence for Operation Spring, Normandy, July 25, 1944" (M.A. thesis, University of Ottawa, 1996).

106. The proof lies in three statements concerning the army's tactical problems. Regarding the inability to maintain momentum, the air force complained "that if the armour had gone on, accepting more casualties, it could have reached Falaise that evening." Greenhous et al., *The Crucible of War*, 311. Carlo D'Este judged that "[t]oo much crucial time had been needlessly lost while [the] infantry struggled to clear villages which ought to have been bypassed and left for followup units to deal with." *Decision in Normandy* (New York: Konecky, 1994), 382. And finally, 21st Army Group's ORS reported that "[t]ank crews were critical of the long wait imposed on them between [phases] . . . before the final objective was bombed, during which 12 tanks were knocked out and the enemy was given time to reorganise." 21 Army Group ORS Report No. 7, "Bombing in Operation Bluecoat," reproduced in Copp, ed., *Montgomery's Scientists*. All three sound like criticisms of Totalize, yet the first two concerned Goodwood, and the latter, Bluecoat.

nents prepared to wage *Materialschlacht*, an antidotal slugging match of attrition. Attacking forces could no longer get through a prepared position in depth without hard pounding.”¹⁰⁷

Simonds’s plan must therefore be seen as a logical reaction to tactical realities which sought to take advantage of the opportunity the strategic air forces provided while putting his prewar theories to the test. The plan may have been complex, but defeating a strong defence in depth required heavy firepower that could not be attained without detailed all-arms coordination. Solving his original set of tactical problems may ultimately have created others, but because there was no way to move artillery forward quickly enough to keep pace with the advance, a complex plan and a rigid timetable seemed preferable to a Phase II assault with insufficient fire support. In any case, a problem more significant than coordinating army and air force efforts was posed by the difficult logistical requirements of moving the three second-phase divisions, plus their supporting arms, forward through a battle area with few roads. If the plan had an evident flaw, it was that Simonds had planned the air strikes to neutralize armoured divisions which had subsequently moved out of the target areas before the operation began. This fact was clear to Simonds by the early afternoon of 7 August, and he may have been guilty of allowing an element of inertia to guide his decisions. Another major change in the plan would have produced chaos, however, so Simonds apparently decided that an abundance of support would be better than a paucity.

Given the success of the Phase I advance, should the second bomber strike not have been aborted on the morning of 8 August in order to take advantage of a fleeting tactical opportunity? Clearly, this was not an option. Because the required lead time for cancellation of the Phase II bombing was moved up along with H-hour, Simonds would have had to make a decision by 0726 hours, at which time the situation of the lead troops was anything but secure. A number of first-phase objectives, including Caillouet, Lorguichon, and the quarry assigned to the RHLI, were not yet in Canadian hands. Even by 0900, the original abort deadline, the German counterattacks were just getting underway. At no point before that time, therefore, did Simonds have any reason to call off the bombers, confused as the situation was on the battlefield. It should be recalled that Goodwood had died out partly due to a lack of fire support in the latter stages, and the air force had been criticised for not attacking targets in depth as the advance progressed. Simonds took these lessons into account. Even if he had wanted to cancel the air strike sometime after the lead squadrons began to move to the startline, by then it was too late. The bombers were already in the air.

107. English, *The Canadian Army*, 311.

Nonetheless, George Kitching, Kurt Meyer, and subsequent historians have all claimed that waiting for the air strike prevented 4th Armoured Division from exploiting the success of Phase I.¹⁰⁸ Arguments attributing causality for failure to “The Pause” take for granted that Phase I had been brought to a tidy and successful conclusion by the morning of the eighth. These arguments are utterly dependent on one key assumption: that both the 4th Canadian and Polish Armoured Divisions were ready and waiting at their startlines on the morning of 8 August while the Germans regrouped.¹⁰⁹ This interpretation relies too heavily on Meyer’s testimony.

From his vantage point in Cintheaux, Meyer claimed to have seen the armoured columns loitering in front of their startline around noon, with open country ahead and nothing holding them back besides the order to wait for the Phase II bomber strike. The bombing commenced at 1226 hours, so Meyer must have been in Cintheaux prior to that time. According to his own account and 4th Brigade’s operations log, however, Ned Amy’s squadron of the Canadian Grenadier Guards, the spearhead of 4th Division, was held up north of Rocquancourt until after 1224 hours.¹¹⁰ Meyer likely saw either the lead formations from the night advance, which were still in the area, or perhaps the tanks of the 4th Canadian and Polish Armoured Divisions, not waiting in front of the startline, but *as they moved up to it*.¹¹¹ In fact, no idle pause was imposed upon the lead squadrons before Eighth Air Force made its bombing run.

With the first two myths thus repudiated, it should also start to become obvious that the inexperience of the armoured divisions has been exaggerated by attempts to explain the slow progress made on the eighth. The bombing of the 4th Medium Regiment was probably a more consequential factor in the Poles’ lack of success once they crossed their startline than Simonds or Nicholson admitted, because it was the medium and heavy artillery that fired counterbattery tasks, and the effectiveness of the German gun screen in halting the armoured attacks has been well recorded. Meanwhile, 4th Armoured Division was also sup-

108. Kitching memoir, 81/150, DHH; Kurt Meyer interview, 3 September 1950, 73/1302, DHH; English, *The Canadian Army*, 291.

109. Jarymowycz, “Canadian Armour in Normandy,” 22–23. Jarymowycz argues in sympathy with Meyer and English, but admits that units were scattered and “anything but a force in place.”

110. Amy wrote that after being told not to proceed to the startline until Rocquancourt was clear, he and his men waited “in our tanks for what seemed hours. The reason for this long delay was difficult to understand as we were not passing through the town but bypassing it to the north.” Amy manuscript.

111. Cintheaux is at an elevation of 120 metres, while Rocquancourt is at 70 metres, and there is no higher point between the two villages. A contour map of the area is included in BAOR Tour, Operation Totalize. The author confirmed this sightline on a personal battlefield tour in October 2000.

ported by the SPs of the 23rd Field Regiment, which was unable to deploy in its allotted positions near Verrières until 1100 hours.¹¹² Caution resulted from open flanks, a lack of information as to friendly and enemy troop dispositions, and insecurity based on the knowledge that their tanks were inferior. It has become part of the Battle of Normandy's lore that soldiers on both sides referred to Shermans as "Ronsons," but as the "tankers" moved up past the burned-out hulks dotting the Goodwood battlefield, why should they not have experienced the same psychological results Simonds did when he watched them burn after crossing *their* startline? Perhaps seasoned veterans would have been less affected by such realities. In any case, Simonds used inexperienced armoured divisions not by choice, but because they were all he had.

To a certain extent, the bombing attacks in Totalize were undertaken simply because the resources were available. The weight of explosive strategic bombers could deliver seemed to promise a way to break an exceptionally resolute opponent. It had not yet been proven that heavy bombing was an inefficient method of destroying ground defences, although this conclusion was later reached by 21st Army Group's operational research teams.¹¹³ The success of Operation Cobra, in fact, suggested that bombing could achieve spectacular results. Simonds therefore continued what was in effect an experiment in air support, in hopes that victory could be achieved at a price less costly in the lives of his men.

Totalize petered out because the advance had gone as far as it could considering the fire support that was available. To defeat the Germans required 2nd Corps to consolidate its positions, move the guns forward, and "tee-up" another set-piece attack. The defences had to be destroyed methodically before the breakout was possible, and as such the objective that had been set for Totalize was unrealistic, despite the numerical imbalance between attacker and defender. Although Falaise was not reached, 2nd Canadian Corps did succeed in smashing two strong German lines, and it crippled 12th SS in the process. The end of the Normandy Campaign was then only a matter of time.

112. Nicholson, *The Gunners of Canada*, 317.

113. 21 Army Group No. 2 ORS Report No. 14, "Heavy Bombing in Support of the Army," reproduced in Copp, ed., *Montgomery's Scientists*. See also Ian Gooderson, *Air Power at the Battlefield: Allied Close Air Support in Europe, 1943–45* (London: Frank Cass, 1998), 125–64.