

# Fifth Canadian Armoured Division: Introduction to Battle

**Bill McAndrew**

The Canadian government authorized the formation of 1st Canadian Armoured Division (CAD) early in 1941. It organized at Camp Borden in March and, redesignated 5th CAD, sailed for the United Kingdom in the fall. Originally its organization was based on two armoured brigades (each of three regiments, a motor battalion and a support group composed of a field regiment, a Light Anti-Aircraft (LAA) regiment, an anti-tank regiment and an infantry battalion). In light of operational experience with armour in North Africa the organization was subsequently changed; an armoured brigade was changed for one of infantry (three battalions), and the support group was modified to include two field regiments (one self-propelled) along with the anti-aircraft and anti-tank units. In addition, there were a motor battalion of infantry, a reconnaissance regiment, two Royal Canadian Engineer (RCE) squadrons and the usual support and administrative units. Once this phase of the division's reorganization was completed, 5th CAD's two brigades were 5 Canadian Armoured Brigade (CAB) (the Strathconas, British Columbia Dragoons, the 8th New Brunswick Hussars and the Westminster Regiment as a motorized infantry battalion), and 11 Canadian Infantry Brigade (CIB) (The Perth Regiment, the Cape Breton Highlanders and the Irish Regiment of Canada). The Governor General's Horse Guards formed the reconnaissance regiment, and artillery support came from the 17th Field, 8th Field (Self-Propelled), 4th Anti-Tank and 5th LAA Regiments.

Equipping the division was a slow, drawn out process. By the end of July 1942, 5 CAB had received only 40 per cent of its tanks, a motley mixture of American General Lees and Stuarts, along with a few Canadian-built Rams which were to be the formation's main battle tank. Not for another year were sufficient Rams available to fill the divisional establishment and, as a result, training suffered. Individual and specialist training went on continuously, and some troop movement and range practice was possible, but the division itself did not take to the field until it participated in the Army-level Exercise "Spartan" in February-March 1943. Afterwards, units were introduced to infantry-tank cooperation drills, but little emphasis seems to have been given the topic, and while the pace of training picked up it was intermittent. The division's operational readiness remained questionable.<sup>2</sup>

The division was initially to participate in the campaign then being planned for North-west Europe. Within a month of the 1st Canadian Infantry Division's landing in Sicily in July 1943, however, the Canadian government proposed to the British Chiefs of Staff that a second division along with a Canadian Corps Headquarters be sent to the Mediterranean for battle experience. The British were at first reluctant but after considerable negotiation agreed to switch their 30 Corps Headquarters with 1 Canadian, and the 7th (Desert Rats) Armoured Division with 5th CAD.

## 5th Canadian Armoured Division August 1944

Major-General G.G. Simonds (1 Nov 1943 to 29 Jan 1944)  
Major-General E.L.M. Burns (30 Jan 1944 to 19 March 1944)  
Major-General B.M. Hoffmeister (20 March 1944 to 6 June 1945)

5 Armoured Brigade	11 Infantry Brigade	12 Infantry Brigade
2nd Armoured Regiment (Lord Strathcona's Horse (Royal Canadians))	11th Independent Machine Gun Company (The Princess Louise Fusiliers)	12th Independent Machine Gun Company (The Princess Louise Fusiliers)
5th Armoured Regiment (8th Princess Louise's (New Brunswick) Hussars)	The Perth Regiment	4th Princess Louise Dragoon Guards
9th Armoured Regiment (The British Columbia Dragoons)	The Cape Breton Highlanders	The Lanark and Renfrew Scottish Regiment
	The Irish Regiment	The Westminster Regiment (Motor)
<b>Divisional Troops</b>		
3rd Armoured Reconnaissance Regiment (The Governor General's Horse Guard)	17th Field, 8th Field (Self-Propelled), 4th Anti- Tank and 5th Light Anti-Aircraft Regiments, RCA	
1st, 10th Field & 4th Field Park Squadrons, RCE	5th Armoured Divisional Signals	

The units sailed in November, some to North Africa, others direct to Italy, and by the end of the year were being concentrated, equipped and acclimated before being assigned operational responsibilities.<sup>3</sup>

As had been the case in Britain, equipment shortages hampered training and delayed the operational deployment of the division. Fifth CAD left its Ram tanks in England for 7th Armoured in exchange for the heavier-gunned Shermans which were now standard in the Mediterranean. General Guy Simonds, its new General Officer Commanding (GOC), decided to await the arrival in Italy of newer gasoline-powered models to replace older diesel Shermans, and the rest of the Desert Rats vehicles were found to be well beyond their useful mechanical lives. Replacements arrived slowly. By the end of the year, for instance, the British Columbia Dragoons had obtained 87

wheeled vehicles, including some Daimler and White scout cars, but no tanks at all. In February, 11 Honey reconnaissance tanks (stripped down Stuarts) were issued and soon after the first Shermans appeared, allowing crews finally to familiarize themselves with their new weapons.<sup>4</sup>

Meanwhile units were introduced to operations piecemeal. Not long after their arrival in Italy, sappers from 10 Field Squadron were committed to construct a bridge over a tributary of the Sangro River in support of the 2nd New Zealand Division. Despite the inadequacies of their inherited vehicles and equipment, the squadron was able to complete a high level crossing in a week and then remained in the sector on maintenance and mine clearing tasks until the end of the year. The other squadron, No. 1, was also called forward and obtained its first experience



*Troops of the Cape Breton Highlanders being piped off the ship upon their arrival in Italy, 8 November 1943.*

(NAC)

clearing mines under fire while supporting 1st Canadian Armoured Brigade, which had accompanied 1st Division to the Mediterranean earlier in the year.

The infantry's introduction to actual operations was less auspicious. In December, Simonds, impressed that 11 Brigade was "steaming ahead," asked that it be sent forward by the end of the month "to get its first experience of contact with the enemy."<sup>5</sup> Early in January 1944 it was placed under command of 1st Division and relieved its 3 Brigade in the line along the Arielli River north of Ortona. At this time the Adriatic front had stabilized into

fixed winter lines. The Allied High Command was preparing major offensives at Cassino and Anzio and wished to prevent the Germans from reinforcing those fronts. Eleven Brigade was thus ordered to mount a limited holding attack across the Arielli to maintain pressure. Its assault on 17 January — successively by the Perths and the Cape Bretons, each with a squadron of tanks — went in across open ground in daylight against well-prepared river-line defences manned by experienced veterans of the German 1st Parachute Division. The combination of a disjointed plan, inexperienced units and strong defences produced a dismal failure. None of the objectives were secured.

The cost of the operation was eight officer and 177 other rank casualties, which prompted Field Marshal Albert Kesselring, the German Commander-in-Chief, to comment, "The trial runs of green troops are nothing famous."<sup>6</sup>

Its morale down, 11 Brigade was quickly withdrawn from the line to recover. Three days later it was placed under command of the 4th Indian Division (along with the Strathconas and Westminsters) and assigned a fairly quiet sector of the defensive line. It was still in this position in early February when 5th CAD HQ relieved the Indians and assumed its first operational role. Then, as part of a general regrouping, the division shifted eastward to join 1st Division under command of the Canadian Corps.<sup>7</sup>

The division's preparation for active operations had been somewhat less than complete. It did not have an opportunity to function as a formation since its arrival in Italy, and equipment shortages severely limited unit training. Further, there was a notable lack of continuity in its command and staff structure during these first few months in the Mediterranean. At the end of 1943 General Simonds returned to the United Kingdom to be replaced by Major-General E.L.M. Burns. In March, Burns succeeded General Crerar as Corps Commander and Brigadier B.M. Hoffmeister became 5th CAD's third commander in as many months. In the same period both 5 Armoured and 11 Infantry Brigades received new Brigadiers, and at divisional headquarters a new CRA [Commander, Royal Artillery] (Brigadier H.A. Sparling), GSO I [General Staff Officer I] and AA&QMG [Assistant Adjutant and Quartermaster General] took up their duties.<sup>8</sup> In noting the army historian's view that the division "still had something to learn about armour in battle," Burns commented later that "This was a considerable understatement, as I think most of the officers and men who arrived at the fighting front in the winter of 1943-44 would agree."<sup>9</sup>

By the time the Canadian Corps became operational in February 1944, the character of the Italian campaign had changed markedly. The Allies had been able to advance rapidly

through Sicily and southern Italy — Fifth (US) Army in the west, Eighth (BR) Army to the east — but then were stopped on a line stretched across the country south of Rome by a combination of determined resistance and winter mud. In mid-January the first of a number of bitter attempts to unhinge the German defences foundered at Cassino, and a month later the enemy successfully contained Fifth Army's attempt to outflank their positions with an amphibious landing at Anzio. Field Marshal Harold Alexander, Commander of the 18th Army Group, therefore, decided to call a halt to his offensive operations in order to prepare a full scale assault in the spring to destroy the German army south of Rome and liberate the capital. As it eventually matured, his plan called for a two-pronged attack. Fifth and Eighth Armies would break through from the South-east, the former along the coast and through the mountains, the latter driving through the valley of the Liri River, the traditional, relatively open, main route to Rome. Then, when the German commander had been forced to commit his reserves, the Allied forces at Anzio would break out, meet the others and isolate the defenders.<sup>10</sup>

There were few commanding precedents to guide planning for the coming offensive. Until then, for the most part, fighting in Sicily and Italy had been from the line of march in an extended advance to contact against continual delaying actions. Now, with the front stabilized, a major set-piece attack was needed to loosen it up once more. Eighth Army had had considerable experience with set-piece attacks, of course, but over terrain significantly different than the Italian where a succession of rivers, defiles and mountains ran across the grain of the advance, restricting movement and reinforcing the natural superiority of the defence. When Crerar and Burns first saw the winter lines they were reminded more of the Western Front they had known a generation earlier than of North Africa, and both were convinced that, lacking room for manoeuvre, massive firepower on the First World War model would be required to break the stalemate. Thus, while the tactical principles for the forthcoming attack were not new, there was a need to rethink them and determine how best they might be applied in the circumstances.



*A Sherman tank of the Second Armoured Regiment (Lord Strathcona's Horse (RC)).*  
(LdSH(RC) Museum)

Following that the troops, units and formations had to be trained to execute them.

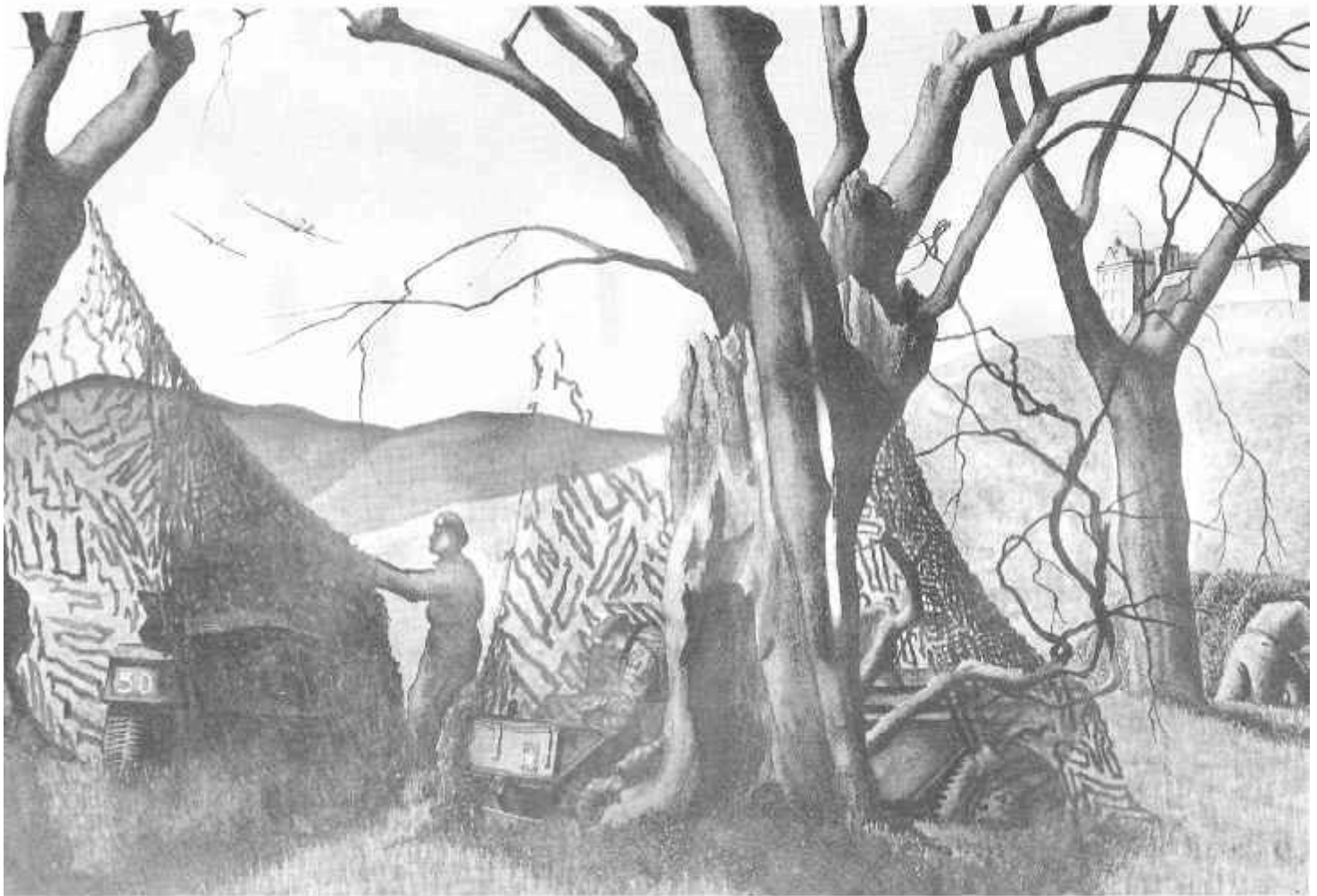
The Canadian Corps undertook a concerted training programme in the spring to prepare for the resumption of mobile warfare. Army, Corps and Divisional schools were opened for all manner of specialist and unit training. Sappers gave instruction in assault river crossing, mine clearing and pioneer work; gunners fired on impromptu ranges and many attended the Eighth Army School of Artillery; units sent cadres for muleteer and mountain fighting courses; armoured units did range firing, and infantry units tried to shed the mould accumulated after a lengthy period in trenches. While 1st Division remained in the line its brigades rotated through reserve and training periods. When Hoffmeister assumed command of 5th CAD it was already in reserve; he stepped up the training pace, emphasizing particularly the need for all-arms cooperation.<sup>17</sup>

Unfamiliarity with the strengths and limitations of other arms and services was perhaps the most common of training weaknesses. Eleven Brigade's Arielli operation had revealed one aspect of the problem, when the reluctance of forward infantry companies to "lean on" their artillery support allowed the German defenders to man their positions and inflict serious casualties. To counter this, Hoffmeister and his staff quickly organized a series of unit live firing exercises, on which the GOC insisted on accompanying the lead platoons to demonstrate how close troops can safely follow their supporting gunfire.<sup>12</sup>

The most effective means of employing armour, and the coordination of tank and infantry fire and movement, was the other principal concern. Before Burns left England for Italy, Montgomery had told him that "There is no role for an armoured division in Italy." But it was there, and he at the corps level and

Hoffmeister at the divisional level had to make do as best they could to adapt prevailing doctrine to their peculiar circumstances. That doctrine, laid down in the manual *The Tactical Handling of the Armoured Division*, had not been written with Italy in mind.<sup>13</sup> The armoured division was intended as "a mounted hard-hitting formation primarily constituted for use against hastily prepared enemy defences, for exploitation of initial success gained by other

armoured force. For maximum effect, the armoured division needed room for manoeuvre, and "Its full power will only be exerted by the employment of its armour concentrated, and supported by all the other components of the division."<sup>15</sup> Then, "By envelopment, or by deep penetration through (the enemy's) defences after a gap has been made in his main position by other formations,"<sup>16</sup> the armoured division could become the "Expanding Torrent"



**Scout Cars in Harbour.**

*Daimlers of the Fifth Canadian Armoured Brigade Headquarters Squadron outside town of Pignatoro Maggiore, Italy. 10 May 1944. From a watercolour from L.P. Harris. (CWM no. 12717)*

formations, and for pursuit."<sup>14</sup> Mobility and fire-power made its mere presence a threat by forcing the enemy continually to alter his own dispositions in anticipation of the unexpected appearance on the battlefield of a large

envisaged by Liddell Hart and practised in blitzkrieg.

There were precious few regions in the enclosed, obstacle ridden Italian countryside,

however, where standard doctrine might be applied. As the units of 7th Armoured Division found on arriving from North Africa, "Gone forever were the days of free manoeuvre in the Desert, of fast movement from one flank to another. . . . Now, they had to drive down narrow roads with ditches on both sides until a burst of fire at the leading car revealed the enemy's position."<sup>17</sup> Rather than armoured formations being deployed in classic cavalry fashion as "the rapier in the hands of the higher commander,"<sup>18</sup> ready to exploit initial success, tanks had to be employed primarily to supplement artillery fire in support of infantry, with units usually decentralized on a squadron/troop basis with battalions and companies. As a formation, the armoured division in Italy was unbalanced; the force of its armour could seldom be concentrated, yet with only one infantry brigade it could not be fought like an ordinary infantry division. When employing 5th CAD, consequently, Hoffmeister had continually to strike a pragmatic compromise between doctrinal theory and the realities of the ground over which he had to operate. In any case, the circumstances placed the highest premium on developing battle-tested drills for infantry/tank cooperation so the two arms could provide maximum mutual support.

The theory of infantry-tank cooperation was simple enough to assert — tanks neutralized enemy wire and machine-guns while the infantry dealt with his mines and anti-tank guns — but its efficient practice was another matter. "The general conception of the attack is a mutual co-operative advance against the objective,"<sup>19</sup> but ground and the tactical situation made each tactical problem unique. Whether tanks should lead or follow the infantry, and whether they might provide support by accompanying them or with supporting fire from a distance, were open questions which no established doctrine could answer conclusively. The two arms had to learn how to communicate with each other, however, for as one contemporary noted, "Apart from insufficient opportunity for preliminary co-operative training between infantry and tanks that are to operate together, the major obstacle to co-operation at the moment is the failure to achieve really satisfactory and reliable means of intercommunication between infantry

and tanks in battle."<sup>20</sup> Or, as another Canadian armoured unit described the problem from below:

In this country with tank vs tank or tank vs anti-tank gun, the attacker is at a disadvantage. It is therefore necessary to spot the anti-tank gun or tank first. This can only be done by the Troop Leader moving forward from fire position to fire position on foot. The enemy can be also spotted and destroyed by the tanks, aided by the infantry as "eyes." This condition only exists where a Squadron has been working and fighting for a considerable period of time, with the same regiment, commanded by a commander who thinks of and has a knowledge of tanks, and imbibes this spirit of co-operation and confidence into his Company commanders.<sup>21</sup>

Effective battlefield drills could only come through intensive integrated training, and when he turned over command of 5 CAB to J.D.B. Smith in February 1944, Brigadier G.R. Bradbrooke pointed to some serious deficiencies in the division's infantry-tank tactical practice. Both infantry and armoured commanders had confided to him their impressions of having been let down by the other. Their attitudes, he judged, had stemmed from mutual ignorance of the other's methods and capabilities. In the attack, infantry wanted tanks right with them and were extremely reluctant to move forward when the tanks became separated or were stopped; tankers complained that the infantry failed to appreciate the impossibility of their maintaining intimate contact while moving over broken ground and, moreover, that they could provide gun fire support just as effectively from long range. The infantry also wanted tanks with them in defence, especially in the period before their own anti-tank weapons got forward; tankers objected that the infantry were reluctant to give them close protection in forward positions at night when they were blind and most vulnerable. Both arms recognized the need for better target indication to enhance their mutual support.<sup>22</sup>

Divisional Headquarters delegated 5 CAB to study the problem and organize a training programme to meet it. In February, the Brigade staff conducted a cloth model exercise and discussion for infantry and tank unit commanders, and followed in March with a series of TEWTs [Tactical Exercise Without Troops], first for squadron/company

commanders, then for Captains and subalterns in both the armoured and infantry brigades. These covered all phases of all-arms cooperation; communications (it was at this time that the tank-mounted infantry telephone was first tried); target indication; deployment drills, orders of march and battle procedure; how ground and the tactical situation would dictate when tanks and when the infantry should lead; use of supporting weapons and fire; night protection; mutual support; command and control. Theory was then put into practice when squadrons and companies were brought into common bivouacs, where they might familiarize themselves with the other arm's equipments, before moving through dry then live firing exercises with all weapons.<sup>23</sup>

A divisional exercise completed the cycle. Designed to train the headquarters and both brigades in deploying from a concentration area and mounting a set-piece attack, it gave particular stress to joint reconnaissance and planning, as well as staff drills for movement and traffic control, and passing information.<sup>24</sup> Unfortunately it was the only divisional level exercise as the concentrated training period was disrupted when 11 Brigade was detached for a month's tour in the line near Cassino, this time under New Zealand command. Five CAB and the other divisional units continued training, but it is impossible to gauge its effectiveness. As is usually the case, some units no doubt profited more from the opportunity than others. Moreover, the difficulties a new commander and staff faced in fusing an efficient fighting armoured division in difficult circumstances cannot be gainsaid. Nevertheless, by the time 11 Brigade returned to the fold early in May, the division was already preparing for its first action as a formation; an assault against the Gustav and Hitler Lines in the Liri River valley South-west of Rome.

Eighth Army's front in the four-to-seven mile wide, east-west Liri Valley was dominated by Mount Cairo on the North (Monte Cassino is a spur) and the Aurunci range to the South. Through the northern side of the valley ran Highway 6, the main Naples-Rome road, and across the valley the Germans had constructed two very formidable defensive positions; the

Gustav Line situated at the eastern end and, further on, the Hitler Line. A number of Liri tributaries meandered across the front, all running against the grain of the advance, and forming serious natural obstacles which were thickened with minefields, pill boxes, dug in tank turrets, wire and machine-guns. General Leese's (who succeeded Montgomery at Eighth Army in December 1943) first objective was Cassino, a task he gave to the Polish Corps. Then, XIII Corps was to assault across the Rapido river at the base of Cassino, form a bridgehead which would breach the Gustav Line, and gain access to Highway 6. Initially held in reserve, the Canadian Corps had one of two tasks in the second phase; either to pass through the British and exploit along Highway 6, or, if the defences did not fold, as seemed more likely, to take over the southern sector of XIII Corps' front and break through the Hitler Line.

The offensive got underway on 11 May and it was soon apparent that there would be no easy bouncing of the defences. The Poles were unable to take Cassino quickly and on the 15th Leese ordered Burns into the Rapido bridgehead. Three tough days later the 1st Division closed on the outposts, mines and wire of the Hitler Line. Meanwhile, south of the Liri, General Juin's North African mountain-trained troops had made a spectacular advance through trackless mountain, raising the possibility they might outflank the Germans fronting the Canadians and force them to withdraw. The fleeting opportunity passed, however, and a two-day pause ensued while Burns moved his guns forward to support a full set-piece attack. He planned his assault, in conjunction with XIII Corps on his right, in two phases; General Vokes' 1st Division would first crack a hole in the Hitler Line position and the 5th CAD would then break out through their gap and advance with all speed up the Liri Valley.<sup>25</sup>

After what was possibly its hardest ever day's fighting, on 23 May, 1st Division succeeded in gapping the Hitler Line defences. General Hoffmeister had set up his headquarters near Vokes' to follow the battle and next morning his lead units began passing through. He planned his attack in three phases

— which followed closely the doctrine on the employment of armoured formations. First his armoured brigade would move through 1st Division, press forward quickly and seize a bridgehead over the next obstacle, the Melfa River, about six miles distant. Then his infantry brigade would take the next six mile bound to the Liri River which it would bridge near the town of Ceprano (where Highway 6 crossed the Liri). Finally the armoured brigade would take over the advance, which with luck would turn into a pursuit before the Germans were able to recover.

Five CAB, organized in three infantry-supported battle groups, and lead by a Strathconas reconnaissance troop and a

company of the Westminster, reached the Melfa in mid-afternoon and formed a bridgehead by nightfall. [See "Battle for the Melfa River" on page 33 for a full description of this action.] Eleven Brigade passed through the following morning and, although its movement stalled during the day, it was able to get patrols across the Liri into Ceprano during the night. It was a good beginning for the Canadian Corps and 5th CAD. As one historian observed, after its first day of fighting as a formation, "The Canadian Corps was thus up to, and in one place over, the Melfa by the end of the day, and had every reason to be satisfied with their success. It was the first time that the 5 (Canadian) Armoured Division had been employed in the classic breakthrough role in



*Mortars of I Canadian Corps firing at night, 6 April 1944.*

(Photo by C.E. Nye/NAC PA 116819)

the Italian campaign." He added, however, that "Unfortunately, the position in the rear of Hoffmeister's division was not so flattering."<sup>26</sup>

Veterans of the action still speak in awe of the confusion of tangled traffic behind the fighting troops. The narrow five mile front heavily favoured the defenders. The Liri valley, hemmed in by mountains on both north and south, was crossed against the grain by successive rivers and defiles which were liberally laced with mines, wire and fixed weapons of all types. The only decent road in the sector, Highway 6 tucked against the base of Monte Cassino, was bitterly contested by the Germans, and blown bridges elsewhere further canalized traffic onto the few insubstantial dirt tracks. In this naturally congested area, Leese insisted on fighting his battle through two corps headquarters. After the 4th British and 8th Indian Divisions had established their Rapido bridgehead, the 78th British Division was slipped through on Burns' right flank to secure Highway 6 and allow the 6th South African Armoured Division to conduct the main pursuit. Burns' deployment was thus severely restricted having to conform with XIII Corps' progress and too many formations were channelled into too small a space. When opposition slowed forward progress the rear telescoped. Moreover, when the 78th Division was delayed by tenacious German rearguards, their units either moved through the Canadian sector or the inter-corps boundary was adjusted to meet their needs. As a result, confusion followed. Infantry support weapons, tanks, bridging, guns and ammunition were blocked from moving forward as priorities on the already inadequate routes were continually and unexpectedly changed, while word of the changes filtered only slowly to troops and units on the move, all making for the same few bridges.

Consequently the final pursuit phase of the operation was slower and less effective than the breakthrough. When 11 Brigade moved across the Melfa on 26 May, its own inexperience and the ravines which separated infantry from supporting tanks slowed its advance. They crossed the river against light opposition on the 27th, but then their first bridge collapsed and badly delayed the opening of a tank route.

By then the armour of both 5th CAD and 6th South African Armoured Division were lined up waiting to cross. Brigadier Smith eventually moved by way of a 1st Division bridge further South and was able to join 11 Brigade to continue the advance on the 29th. Movement was still hampered by rugged terrain, however, which severely limited deployment and on the last day of May 1st Division assumed the lead until the Corps went into Army reserve on 4 June.

The Canadian Corps performed creditably in its first operation, breaking through a formidable defensive position and advancing 40 miles over very difficult country admirably suited for delaying tactics. Yet recriminations emerged in the aftermath. Leese was criticized for his ponderous handling of the battle, and in turn he found fault with Burns for moving too slowly and failing to exercise full control of his battlefield. Some of his criticism was justified, as Burns acknowledged. It would have been unusual had an untried commander and staff, along with an untested armoured division, not experienced difficulties in its first operation, especially a major one like the assault on the Hitler Line. But Leese's strictures were overdrawn, ignoring as they did the responsibility of his own headquarters to manage the front on which he had deployed two corps. He nevertheless attempted to replace Burns with an experienced British commander and, when that failed, to break up the Canadian Corps. The plan was only dropped when Burns pointed out the political implications of such a move. Instead, within a few weeks the Corps was assigned a major role in breaking through the Adriatic sector to the next German defensive barrier, the Gothic Line, stretching across the Italian peninsula from Spezia on the west to Pesaro in the east. First, there was a period for recuperation to absorb reinforcements, as well as the reflection and training; "time to absorb the lessons which they had learned in the recent fighting."<sup>27</sup>

The Liri Valley fighting gave the Corps the incomparable training experience which only actual operations can provide, and there were many lessons to digest. All units and formations compiled impressively detailed after-action reports, including an analysis of "lessons

# The Tactical Lessons of the Italian Campaign

Tactical lessons abounded, many of them familiar, which tended to be easily forgotten when they were most needed. In summary they included the following:

## Artillery

- ✓ Counter battery fire should be provided throughout infantry action.
- ✓ More smoke to mask observation points should be employed.
- ✓ It was feasible to decentralize control of Self-Propelled batteries to the armoured brigade in fluid operations.
- ✓ Forward Observation Officers should move to successive observation posts rather than attempt to follow up behind tanks.
- ✓ Numbered targets, widely distributed and registered in advance, gave much quicker and flexible response.
- ✓ Air Observation Posts had been invaluable.
- ✓ The movement forward of guns had been extremely difficult, and units had experienced problems keeping in range of rapidly advancing troops. Forward movement had to be carefully planned, and both SP guns and Jeep-drawn 75s had proved invaluable.
- ✓ Experiments using air bursts over reference points for direction keeping had been effective.

## Infantry

- ✓ Infantry must keep moving forward when their supporting tanks are held up.
- ✓ Small infantry weapons could be effective against much larger targets. PIATs had disabled enemy tanks, and on one occasion a two inch mortar had silenced a self-propelled 88.
- ✓ Lightening loads, by leaving small packs, proved effective.

## Armour

- ✓ Tanks must remain open during operations.
- ✓ Recce troops were invaluable; their crews needed training in mine-lifting and demolitions, and all section commanders had to be trained in calling for artillery support.
- ✓ German Panther tanks needed quick flank shots to disable them.
- ✓ Tank commanders had to make foot reces before breaking cover.
- ✓ Tanks should not be decentralized below the squadron, and preferably, the regimental level.
- ✓ Tanks, also, should employ smoke to mask observation points.

## Control

- ✓ Information must be passed quickly, up and down.
- ✓ Commanders at all levels should remain in their headquarters as much as possible.
- ✓ Commanders engaged with the enemy must not be called back for orders.
- ✓ Engineer plans must be drawn at the highest level.
- ✓ When more than one unit or formation use the same roads, the traffic plan must be arranged by the next highest headquarters.

\* As well as the after action reports see Chief of Staff CMHQ, to Secretary, DND, 22 July 1944 (for transmission to No. 10 Intermediate C.W.S.C.), RG 24, Vol. 12,744; and Burns to McNaughton, 2 July 1944, DAC, McNaughton papers, Vol. 266.

learned," which Corps Headquarters consolidated in two major papers; "The Set-Piece Attack: Lessons from the Breakthrough of the Hitler Line," and "Lessons of the Pursuit from Melfa to Agnani." Early in June a full scale training conference for Lieutenant-Colonels and above met to discuss tactics for the breakthrough and advance phases which could then be practised and rehearsed for the next operation.<sup>28</sup>

Fifth CAD concluded there were both tactical and organizational difficulties to correct. The divisional staff, for example had to modify its deployment drills. General Hoffmeister had

fought his battle from a small, detached tactical headquarters (initially at least from a command tank, which he soon abandoned for a jeep), but it provided impractical to operate the headquarters effectively for more than a short period with a split staff. Wireless communications were unreliable (caused partially by the high density of formations and the consequent crowding of frequencies) and it had not been possible to manage the passage of information, up or down, during the fighting. This applied equally to the CRA's headquarters, which was undermanned in the best of circumstances.

The two principal organizational faults were a shortage of sappers and infantry. An armoured division had only two field squadrons on establishment, yet its need for bridging and mine clearing was proportionately greater than an infantry division's. A strong case was made for adding a third squadron, and this became tied to a proposal for adding a second infantry brigade. The need for additional infantry was made particularly clear during the advance from the Melfa when it proved impossible to maintain momentum with just one infantry brigade. There were too few troops either to thicken the front to an appropriate width for deploying armour, or to leapfrog brigades on a narrower frontage to speed forward movement.

British armoured divisions in Italy began to receive more infantry, and Burns pressed Canadian headquarters in London for similar reinforcement. After considerable discussion, it was agreed, but with one major caveat; all the units for the new brigade had to be found within current Canadian Corps resources. Twelve Canadian Infantry Brigade thus came into existence on 13 July when General Burns informed Brigadier D.C. Spry that he would leave 1 CIB to take command of the new formation.<sup>29</sup> The Westminster became its first battalion. The two others were converted from other units; the Princess Louise Dragoon Guards (PLDG) (1st Division reconnaissance regiment) was one, the 1st Canadian Light Anti-Aircraft Regiment, initially rebadged as the 89th/109th Battalion, then as the Lanark and Renfrew Scottish, the other. Additional artillery, engineer and service units were found among Corps troops.

It was clearly going to be no easy task to form a new brigade headquarters and impose control over such an *ad hoc* grouping. There was little difficulty absorbing specialist troops, for instance, the AGRA's [Army Group Royal Artillery] 11th Field Regiment, but converting PLDG troopers and anti-aircraft gunners quickly to infantry did present problems. Training had to begin back at the individual level (tests of elementary training) before even section let alone company tactics could be practised or support weapons deployed. An experienced infanteer, Lieutenant-Colonel W.C. Dick moved from Brigade Major of 11 CIB to

command the Lanarks, but he can hardly have been encouraged when the brigade's first shipment of training pamphlets consisted of 150 copies of one for the long-gone Lewis gun. Training, interrupted continually with inevitable moves and housekeeping, was, consequently, less than thorough. All units did field firing, and each PLDG squadron managed to complete a river crossing exercise before the divisional staff put the brigade itself through Exercise "Canyon," a simulated assault crossing against a defended river obstacle. This was done under a new commander, Brigadier J.S. Lind (Spry having been promoted and sent to France). The following day, 18 August, units received their movement instructions for Operation "Olive" - a full-scale attack against the Gothic Line. There was no more time for training; 5th Canadian Armoured Division was needed on the battlefield.<sup>30</sup>

#### NOTES

1. The details of organizing and equipping the division are found in C.P. Stacey, *Six Years of War* (Ottawa: Queen's Printer, 1955). Fourth Canadian Infantry Division was later converted to armour, hence its lower number.
2. The initial intention was to equip army tank brigades with British Churchill tanks and armoured divisions with Rams. Both were eventually replaced with the bigger gunned Shermans, *Ibid*, p.546. On the difficulties of training with little equipment see R.H. Roy, *Sinews of Steel: the History of the British Columbia Dragoons* (Kelowna: BCD's, 1965), pp.129-207.
3. Contingents of both corps and army troops were included. Corps troops comprised the Royal Canadian Dragoons, 1st Light Anti-Aircraft, 7th Anti-Tank and the 1st Survey Regiments along with engineer, signals and service units. As well as GHQ and L of C Units, and two General Hospitals, Army troops included 1st Army Group RCA, of 1st, 2nd and 5th medium regiments and 11th Army Field Regiment.
4. *Sinews of Steel*, pp.225-227. For a detailed account of the equipping of 1 Corps and 5th CAD see Operation "Timberwolf," Canadian Military Headquarters (CMHQ) Historical Section Report No. 170, D Hist. Also, see Gordon Wood, *The Story of The Irish Regiment of Canada 1939 1945* (n.p., n.d.), p. 17.

5. Simonds to Crerar, 4 December 1943, quoted in Operation "Timberwolf," Historical Section, CMHQ, Report No. 170, D Hist.
6. Quote in G.W.L. Nicholson, *The Canadians in Italy* (Ottawa: Queen's Printer, 1956), p.371.
7. At the time the two Canadian divisions were under command of separate British Corps (V and XIII), and General Crerar had some difficulty persuading the commander of Eighth Army to group the Canadian formations within Canadian command. The switch was formally completed on 9 February when a Canadian Corps was operational for the first time since 1918. See Operation "Timberwolf." *loc cit*.
8. Simonds returned to England to take command of II Canadian Corps; Crerar succeeded General A.G.L. McNaughton at First Canadian Army. The new brigade commanders were J.D.B. Smith and T.E. D'O. Snow.
9. E.L.M. Burns, *General Mud* (Toronto: Clarke, Irwin, 1970), pp. 122-23.
10. For a detailed account of the genesis and implementation of Alexander's plan, "Operation Diadem," see W.F.G. Jackson, *The Battle for Rome* (London: Batsford, 1969). See also Jackson's larger canvas, *The Battle for Italy* (London: Batsford, 1967).
11. The specific details of training are in the various unit War Diaries in the RG 24 collection at the National Archives of Canada (NAC). In particular see the personal War Diary of General Burns in Vol. 17,507, March-October 1944, and "Highlights of Training," 5th CAD, April 1944, Vol. 10,932.
12. Transcripts of interviews H.A. Sparling/McAndrew and A.E. Wrinch/McAndrew, June 1980, D Hist.
13. The pamphlet was one of a series, printed in 1943. Copy in D Hist.
14. *Ibid.*, p.4.
15. *Ibid.*, p.5.
16. *Ibid.*
17. G. L. Verney, *The Desert Rats: The History of the 7th Armoured Division, 1938-1945* (London: Hutchinson, 1954), p. 170.
18. *The Tactical Handling of the Armoured Division*, p.5.
19. "Notes from Theatres of War, No. 20: Italy 1943/1944," p.27, D Hist. The regimental history of the Perth Regiment has noted that "Although they had been with an armoured division for four years, the Perths had had remarkably little opportunity to train in teamwork with armoured regiments, before they went into action north of Ortona with a squadron of the Three Rivers Regiment in support." Stafford Johnston, *The Fighting Perths* (Stratford: Perth Regiment Veterans' Association, 1964), p.71.
20. *Ibid.*
21. "Report by O.C. 14 Cdn Armd Regt," 9 - 20 December 1943, D Hist 018 (D1), No. 13.
22. G.R. Bradbrooke to all CO's, 5 CAB, War Diary, February 1944, RG 24, vol. 14,056.
23. 5th CAD Training Instruction, No. 25, 12 March 1944, RG 24, Vol. 10,947; War Diary 5 CAB, March-April 1944, Vol. 14,056; War Diary Irish Regiment of Canada, March-April 1944, Vol. 15,085.
24. "EXTHRUSTER," Vol. 10,932.
25. The operation is described in Nicholson, *The Canadians in Italy*. See also CMHQ, Historical Report No. 121, D Hist.
26. Jackson, *The Battle for Rome*, p. 170.
27. Nicholson, *The Canadians in Italy*, p.450.
28. "Training Conference, 10 June 1944," RG 24, Vol. 10,932.
29. Eleven Brigade also got a new commander at this time, Lieutenant-Colonel I.S. Johnston who had led the 48th Highlanders through the Sicilian and the Italian campaigns.
30. On the state of 12 CIB at this time, see its War Diary, July-August 1944, in RG 24, Vol. 1,416.

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