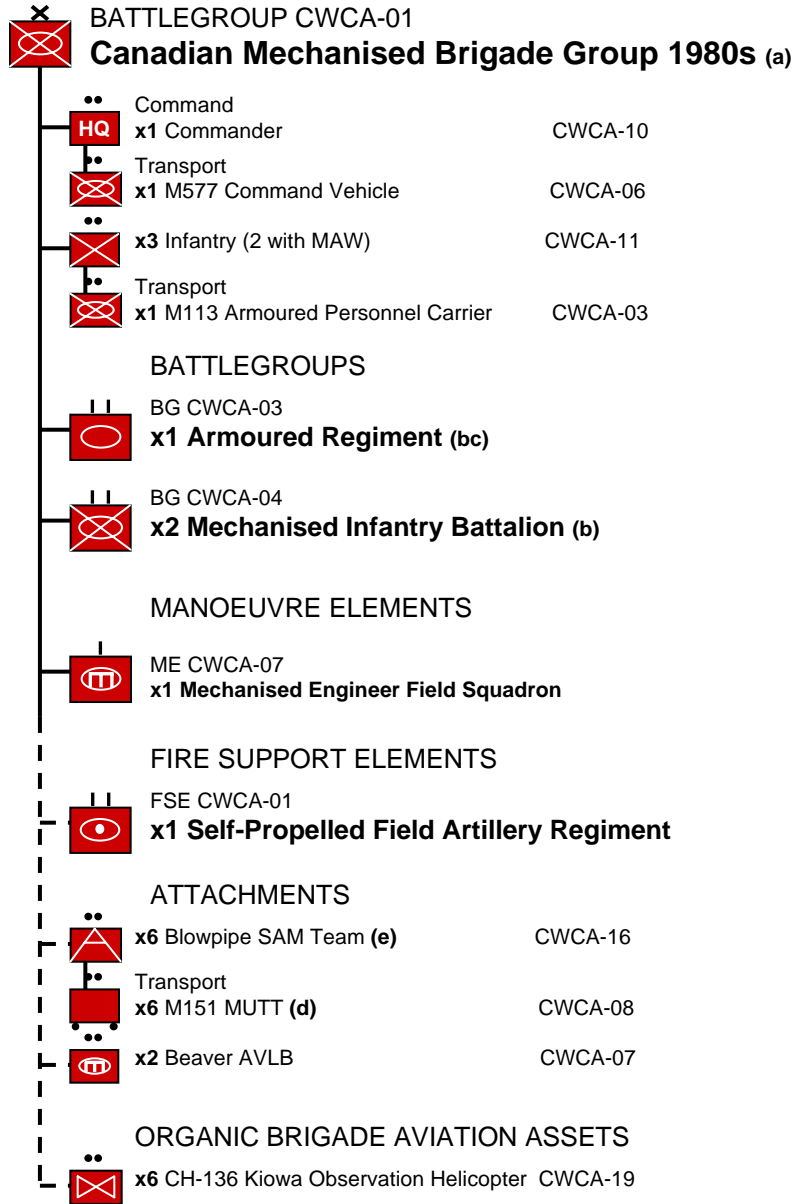


# Canadian TO&Es 1980 to 1989 v.1.6



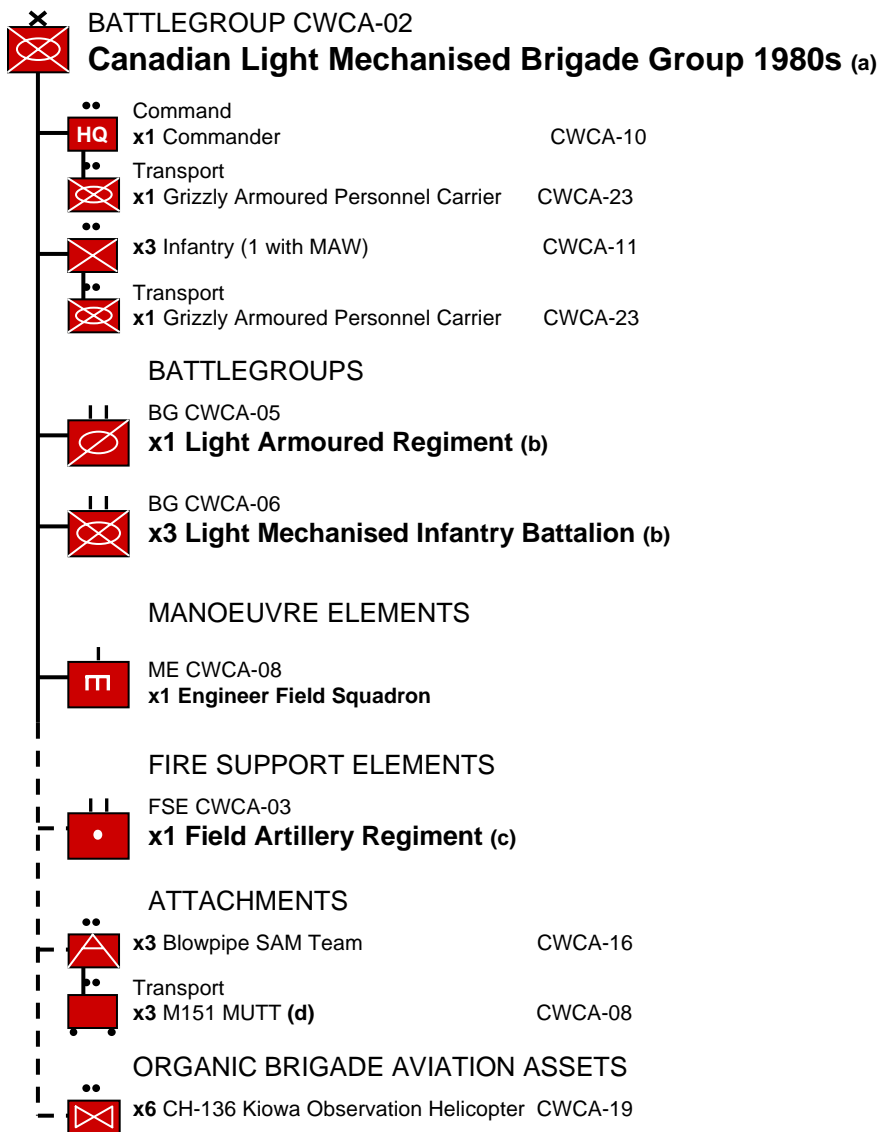
**(a)** The 4th Canadian Mechanised Brigade Group (4 CMBG) was Canada's contribution to NATO's Central Army Group (CENTAG) in (South) West Germany throughout the Cold War. Based at CFB Lahr in the Black Forest, 4 CMBG was assigned to US VII Corps and could expect to find itself fighting alongside US, West German or French forces in the event of World War 3 breaking out. US VII Corps assets would be allocated to the Brigade and in exercises these usually took the form of AH-1 Cobra attack helicopters and additional artillery, AA and engineering assets. 4 CMBG was the subject of one of the 'Cold War Military Literary Classics' – 'First Clash' by Kenneth Macksey. In his book, Macksey took the events of an actual NATO exercise and described it in real terms. The book was written as a guide for junior officers and NCOs and was only published more widely due to its popularity. Consequently, the book is packed with excellent maps and useful information for the wargamer and is a fully-formed wargames campaign in itself. It is not therefore surprising that I have chosen to build this formation in 15mm!.

**(b)** In the field and in common with other professional NATO armies such as the UK and USA, the three distinct battalions of the brigade would be rearranged into three combined arms infantry-armour battlegroups.

**(c)** From 1988, the Canadian 1st Infantry Division was re-established as a part of US VII Corps in Germany. However, 4 CMBG remained the only permanently-deployed Canadian brigade in Germany. The other two brigades, 1st & 5th, along with the divisional headquarters, were to be deployed from Canada during war preparations, along with US reinforcement waves. 1 CMBG was organised almost identically to 4 CMBG, though had a Light Armoured Regiment (BG CWCA-05) instead of an Armoured Regiment, as Canada only had enough Leopards for the single regiment within 4 CMBG. 5 CMBG was organised on a lighter scale, with wheeled AFVs rather than tracked (see BG CWCA02).

**(d)** May replace M151 MUTTs with:  
 x3 M113 Armoured Personnel Carrier CWCA-03

**(e)** 4 CMBG's air defences were normally boosted quite considerably by M48 Chaparral SAMs and M163 Vulcan 20mm AA from US VII Corps.

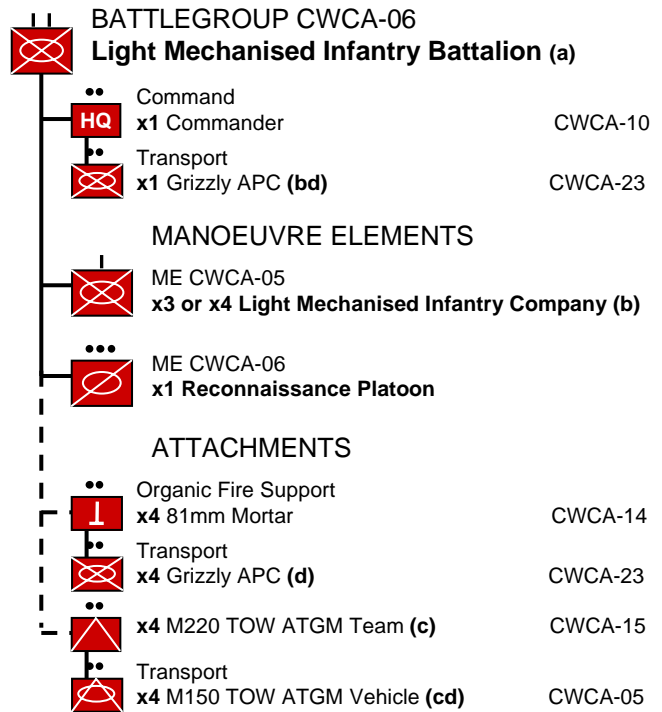
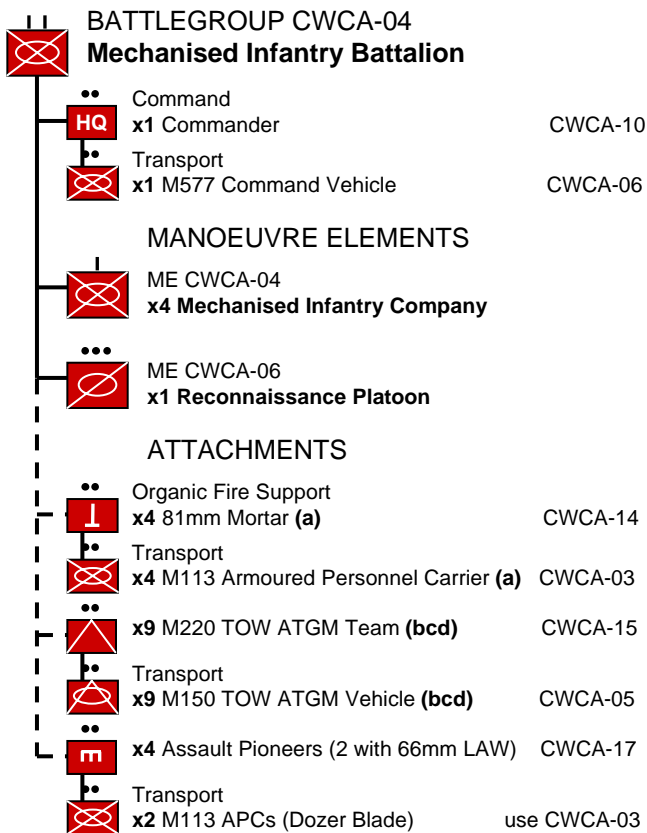
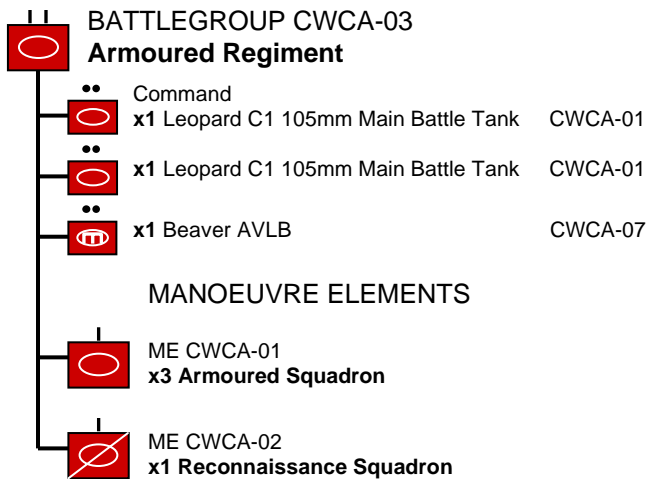


(a) The prime factor differentiating this type of formation was that its vehicles were mainly wheeled rather than tracked. Wheeled AFVs are much better-suited than tracked vehicles when travelling the vast distances that any defence of Canadian soil would require. As discussed in BG CWCA-01, the Canadian 1st Infantry Division was re-established as a part of US VII Corps in Germany from 1988. 5 CMBG, using this organisation, was assigned to 1st Division and would be deployed to Germany, along with 1 CMBG and the divisional headquarters, with US reinforcement waves.

(b) In the field and in common with most other professional NATO armies such as UK and USA, the four distinct battalions of the brigade would be rearranged into four combined arms infantry-armour battlegroups.

(c) The only source to describe the artillery component of 5 CMBG describes them as M101 105mm Howitzers (of which Canada had 179 in stock). However, as 1 CMBG and 4 CMBG both had M109A1 self-propelled 155mm howitzers, it seems likely that when deployed, 5 CMBG would have taken M114 155mm Howitzers with it to Germany (of which Canada had 57 in stock).

(d) May replace M151 MUTTs with:  
**x3 Grizzly Armoured Personnel Carrier** CWCA-23



(a) The Canadians had long intended to purchase M125 81mm Carriers from the USA and M125s consequently appear with regularity in Canadian wargame army lists. However, this contract was never pursued with much vigour by successive Canadian administrations and was finally cancelled with the end of the Cold War.

(b) The TOW ATGMs may fire from their M150 carriers when transported.

(c) In 4th Mechanised Brigade Group from 1988: Delete dismountable TOW ATGM teams and replace all M150 TOW ATGM vehicles with:  
x9 M113 TUA M220A2 ATGM Vehicles CWCA-04

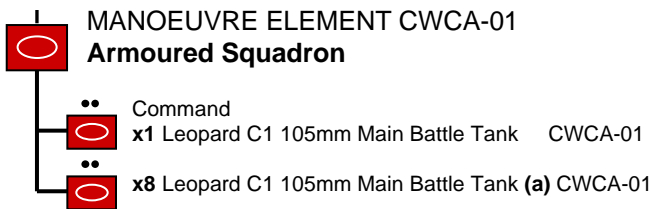
(d) One source suggests that the battalions of 1 CMBG had fewer TOWs than 4 CMBG (perhaps x4 per battalion, as for BG CWCA-07?) and did not receive M113 TUA until the end of the Cold War.

(a) One such battalion was permanently assigned to form the nucleus of a battlegroup that would be deployed as part of ACE Mobile Force – most likely to be used on NATO's Northern Flank, in Norway, Denmark or Iceland. This battlegroup normally had a Light Field Battery of 105mm Howitzers attached. This battlegroup had eighty Grizzly and Bv-202 vehicles pre-positioned in Norway.

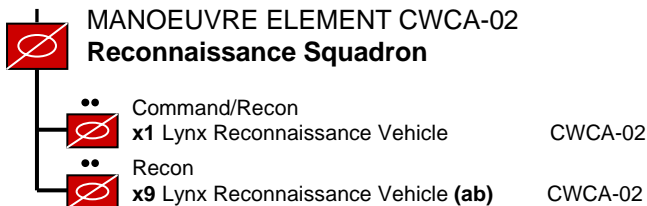
(c) Some battalions possibly had one company mechanised in M113. In which case, replace x1 Company with ME CWCA-04.

(c) The TOW ATGMs may fire from their M150 carriers when transported.

(d) May replace some or all transport with:  
Häggblunds Bv-202 Arctic Warfare Tracked Carrier CWCA-28

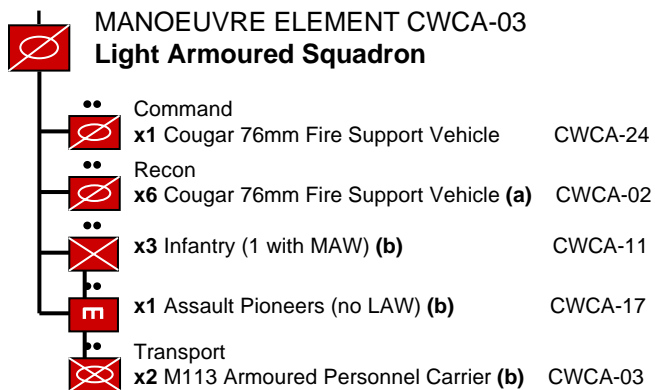


(a) May be deployed as four Troop-sized MEs, each of **x2** Leopard. Designate one Leopard in each Troop as the Troop Commander.



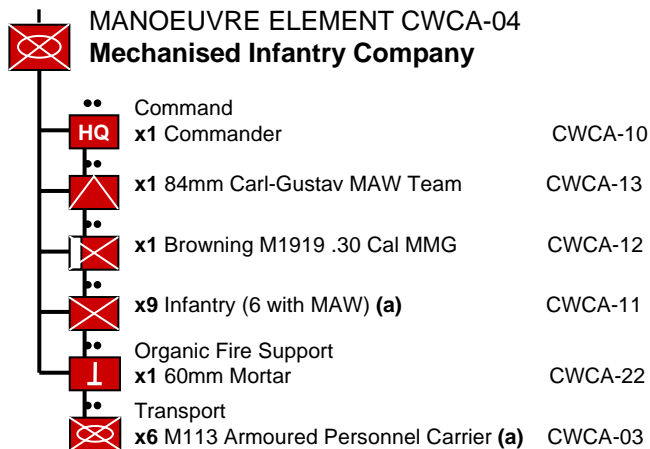
(a) May be deployed as four Troop-sized MEs, each of **x2** Lynx. Designate one Lynx in each Troop as the Troop Commander.

(b) Recce Squadrons of Light Armoured Regiments had an additional Troop: Add **x2** Lynx.

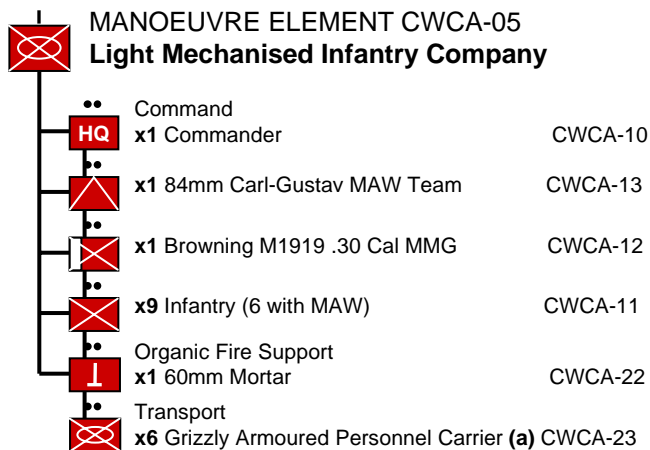


(a) May be deployed as three Troop-sized MEs, each of **x2** Cougar. Designate one Cougar in each Troop as the Troop Commander.

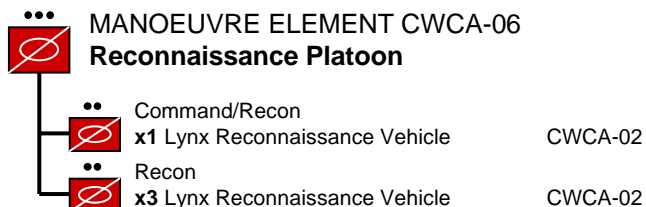
(b) The Infantry and Pioneer elements may be deployed as a separate Assault Platoon. Designate one Infantry unit as the Platoon Commander.



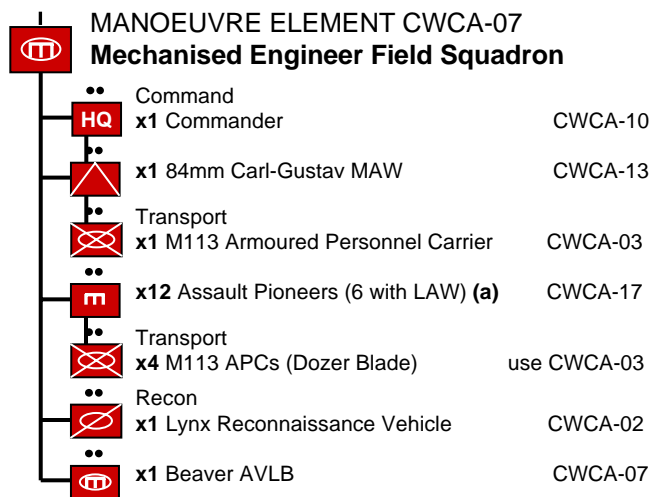
(a) It was common practice for the infantry to dismount the .50 cal HMGs from some of their M113 APCs in order to reinforce a position. They carried HMG ground mounts to enable them to do so. May therefore exchange up to **x3** Infantry for Browning M2 .50 Cal HMG units (CWCA-21). Disarm an equivalent number of M113 APCs (use the M577 card CWCA-06 for disarmed M113s).



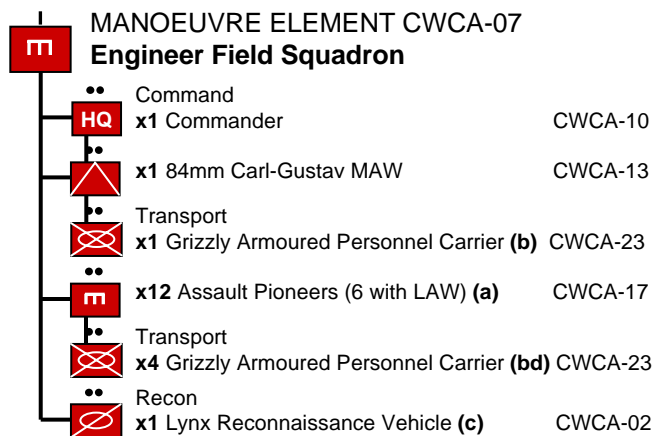
(a) May replace some or all transport with:  
Häggblunds Bv-202 Arctic Warfare Tracked Carrier CWCA-28



(a) In 1989: in Light Mechanised Infantry Battalions: Replace all Lynx with:  
Iltis Light Utility Vehicle use CWCA-08



(a) The Canadians were known to be the last NATO army to employ flamethrowers. However, I am unable to discover if they were still being used into the 1980s. If you wish, designate **x4** Assault Pioneer units in the Squadron as being equipped with flamethrowers. These will have a CC rating of +4 vTGsV. However, these units will not be equipped with LAW.



(a) The Canadians were known to be the last NATO army to employ flamethrowers. However, I am unable to discover if they were still being used into the 1980s. If you wish, designate **x4** Assault Pioneer units in the Squadron as being equipped with flamethrowers. These will have a CC rating of +4 vTGsV. However, these units will not be equipped with LAW.

(b) It is possible that these units may not have received APCs. May therefore replace all transport with:

- x1 M151 MUTT (or Iltis) CWCA-08
- x4 M35 2½-ton Truck CWCA-09

(c) In 1989: Replace Lynx with:  
 Iltis Light Utility Vehicle use CWCA-08

(d) May replace some or all transport with:  
 Hägglunds Bv-202 Arctic Warfare Tracked Carrier CWCA-28



(a) May replace Grizzly APC with:  
 M151 MUTT (or Iltis) CWCA-08

(b) May replace 105mm Howitzers with:  
 M114 155mm Howitzer

### Canadian Air Support

The Canadian 1st Air Division in West Germany comprised three squadrons, each with **x9** CF-116 Fighter-Bombers.

A further five squadrons were based in Canada and assigned to reinforce 1st Air Division in wartime.

The CF-116 was progressively replaced by the CF-18 Hornet from the early 1980s onwards, with the 1st Air Division being among the first to receive the new aircraft. Nevertheless, two squadrons remained equipped with the CF-116 into the 1990s.

Each Canadian battlegroup should have a FAC mounted in a vehicle of an appropriate type – M113, Grizzly, Bv-202 or Jeep. The Brigade Observation Helicopters may also function as FACs.

## Canadian Card List

(Model availability: SOG=Skytrex/Old Glory, QRF=Quick Reaction Force/LKM Direct, PP=Peter Pig, QC=Quality Castings/Old Glory 15s)

<b>CWCA-01</b> – Leopard C1 105mm Main Battle Tank	QRF (Leopard 1A3)
<b>CWCA-02</b> – M113 C&R Lynx Reconnaissance Vehicle	(soon from QRF)
<b>CWCA-03</b> – M113 Armoured Personnel Carrier	QRF, SOG, PP, QC
<b>CWCA-04</b> – M113 TUA (M220A2 TOW2 'TOW Under Armour')	
<b>CWCA-05</b> – M150 ATGM Vehicle (M220 TOW)	QRF, SOG
<b>CWCA-06</b> – M577 Command Vehicle	QRF, SOG, PP
<b>CWCA-07</b> – Beaver AVLB	(Biber)
<b>CWCA-08</b> – M151 MUTT Light Utility Vehicle	QRF, SOG
<b>CWCA-09</b> – M35 2½-ton Truck	QRF, SOG
<b>CWCA-10</b> – Commander	
<b>CWCA-11</b> – Infantry (M72 66mm LAW & 84mm Carl-Gustav MAW)	
<b>CWCA-12</b> – Browning M1919 .30 Cal MMG	
<b>CWCA-13</b> – Carl-Gustav 84mm MAW Team	
<b>CWCA-14</b> – 81mm Mortar	
<b>CWCA-15</b> – M220 TOW ATGM Team	QRF
<b>CWCA-16</b> – Blowpipe SAM Team	
<b>CWCA-17</b> – Assault Pioneer (M72 66mm LAW & Flamethrower)	
<b>CWCA-18</b> – Forward Observer	
<b>CWCA-19</b> – CH-136 Kiowa Light Observation Helicopter	Pocket Pak
<b>CWCA-20</b> – CF-18 Hornet Fighter-Bomber	Italeri
<b>CWCA-21</b> – Browning M2 .50 Cal HMG	
<b>CWCA-22</b> – 60mm Mortar	
<b>CWCA-23</b> – Grizzly Armoured Personnel Carrier	
<b>CWCA-24</b> – Cougar 76mm Fire Support Vehicle	
<b>CWCA-25</b> – CH-118 Iroquois Utility Helicopter	Revell, Corgi
<b>CWCA-26</b> – CH-147 Chinook Heavy Transport Helicopter	
<b>CWCA-27</b> – CF-116 Fighter-Bomber (CF-5A Freedom-Fighter)	Italeri, Revell
<b>CWCA-28</b> – Hägglunds Bv-202 Arctic Warfare Tracked Carrier	

## Modelling & Painting Notes

- Canadian infantry were armed very much as British troops of the period, with SLR, GPMG, SMG, M72 66mm LAW & Carl-Gustav 84mm MAW. However, they were equipped with US M1 helmets (with US-issue camouflage covers), which made them look somewhat different. Nevertheless, Canadians with full helmet camouflage did look very much like British in silhouette and they also wore berets like the British. Consequently I use QRF's Post-War British Infantry range. You can also mix in occasional Peter Pig Vietnam US & Australians and 'Professional' troops in bush hats from their 'AK47' range. Peter Pig also produce LAW gunners both in US helmets (for Vietnam) and in bush hats (in the AK47 range). For the support weapons, WW2 US .30 Cals, .50 Cals and 60mm Mortars are very suitable and are available from almost all 15mm manufacturers. Carl Gustav teams are available in the QRF British Infantry range or can be converted from LAW or Bazooka gunners and Blowpipe SAMs can be converted from Peter Pig's SA-7 'Grail' pack in their AK47 range.
- Uniforms were a plain olive drab that faded rapidly to a light grey-green, very much like West German uniforms of the period and more grey than US OD uniforms. I use Humbrol 86 with quite a lot of white mixed in. Small Canadian flags in red & white were worn high on the upper arm, with NCO badges in yellow just below. Canadian officers wore naval-style yellow rank 'rings' on the epaulettes. These full-colour items were changed to subdued khaki versions during the 1980s, though the full-colour badges did persist.
- All vehicles except the Leopards were painted in a unique Canadian three-colour scheme, which featured a bluish-green base colour, with bands and large patches of black and khaki drab, painted to a standard pattern (with varying degrees of success!). Note that the green and khaki was reversed for vehicles stationed in Canada (which included all vehicles of 1 CMBG & 5 CMBG, as well as occasional vehicles seen in 4 CMBG). The black patches would be whitewashed in winter. Leopards were left in their original German factory-finish 'Yellow-Green' ('Gelbegrun' – as for West German forces; this paint was meant to reduce IR detection), but by the late 1980s had been repainted in the new NATO three-colour scheme of olive drab, black and red brown. See the superb 'Armoured Acorn' website for many full-colour plates of these colour schemes – the site includes the approved patterns for camouflage on all Canadian AFV types, as well as actual examples seen in the field (which sometimes did not conform to the official patterns).