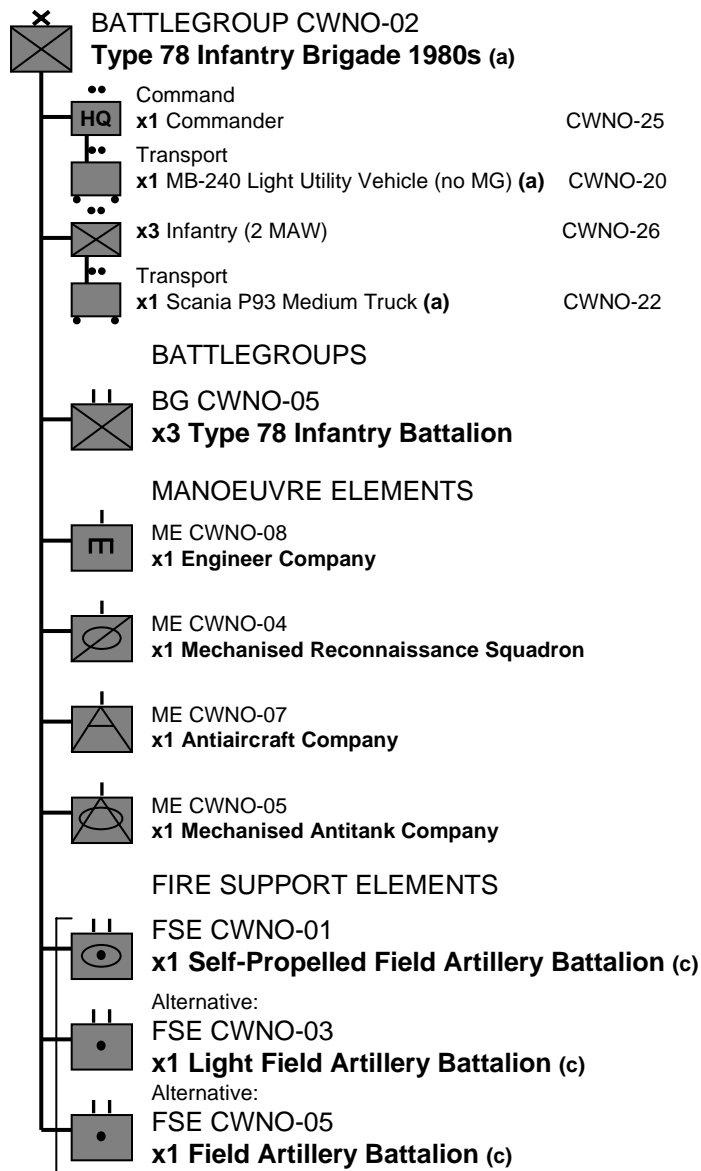
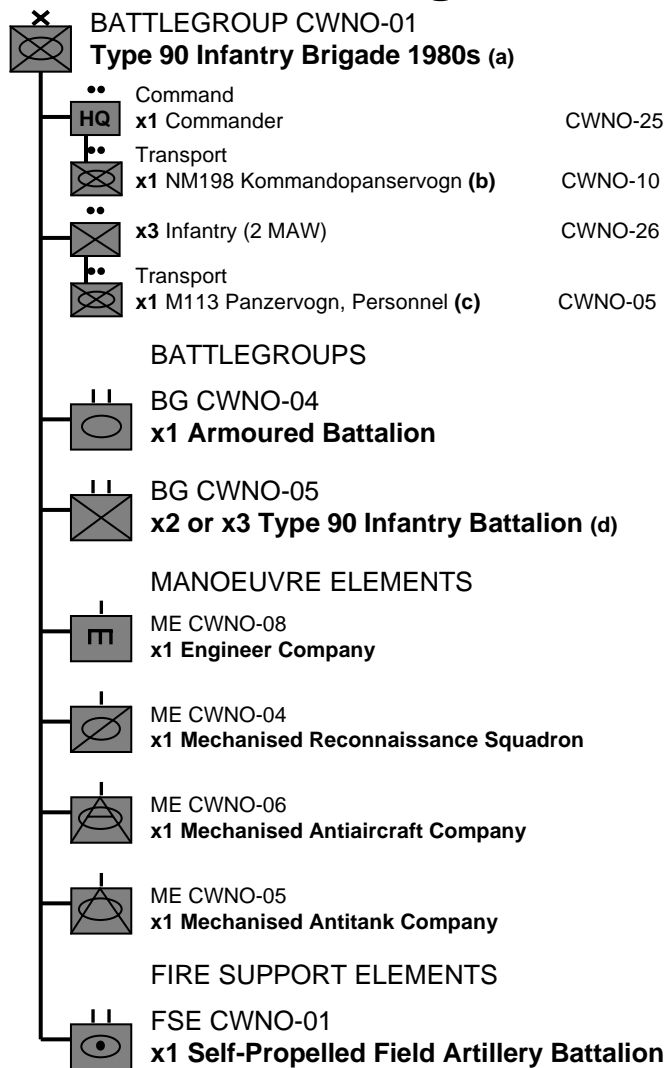


Norwegian TO&Es 1980-1989 v2.2



(a) There were three Type 90 Brigades in the Norwegian Army: 'Brigade North', 'Brigade South' (also known as 4th Brigade) and 12th Brigade. Brigade North was the Norwegian Army's main standing regular formation and in the event of war would be deployed immediately to the Finnmark border area. Brigade South and 12th Brigade were formed from reservists. The remaining nine brigades were all Type 78 Brigades (BG CWNO-02). There were also seventeen 'Defence Districts' that varied widely in size and composition: many had no Regular or Reserve units at all, but simply provided command functions to the Land Home Guard (of which there were 470 platoon-sized units across Norway; most of which were infantry, but some were AA units – see ME CWNO-07). Other Defence Districts (particularly in the Finnmark) included reserve and regular units such as infantry and artillery battalions, with which to back up the Land Home Guard. These units included three independent Tank Companies (ME CWNO-01) – two of which were equipped with Leopard and the third with M48. In war, three divisions would have been formed, but there were no permanent structures in place during peacetime and no permanently-assigned divisional support troops.

(b) May replace NM198 Command vehicle with:
 Hågglands Bv-202 Arctic Warfare Vehicle CWNO-12

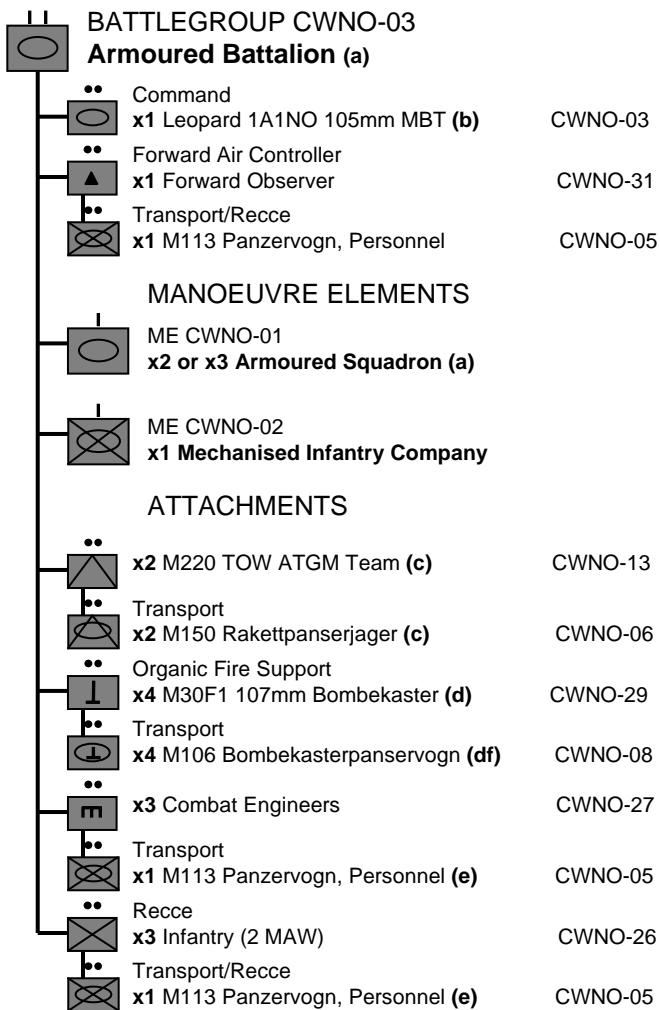
(c) May replace M113 with:
 NM135 'Stormpanservogn' 20mm APC CWNO-04
 Alternative:
 Hågglands Bv-202 Arctic Warfare Vehicle CWNO-12

(d) Brigade North had **x2** Infantry Battalions. The others had **x3**.

(a) There were nine Type 78 Brigades in the Norwegian Army: 1st, 3rd, 5th, 7th, 8th, 13th, 14th, 15th and 'Vestlandet'. All Type 78 Brigades were made up of reservist units. There were also seventeen 'Defence Districts' that varied widely in size and composition: many had no Regular or Reserve units at all, but simply provided command functions to the Land Home Guard (of which there were 470 platoon-sized units across Norway; most of which were infantry, but some were AA units – see ME CWNO-07). Other Defence Districts (particularly in the Finnmark) included reserve and regular units such as infantry and artillery battalions, with which to back up the Land Home Guard. These units included three independent Tank Companies (ME CWNO-01) – two of which were equipped with Leopard and the third with M48. In war, three divisions would have been formed, but there were no permanent structures in place during peacetime and no permanently-assigned divisional support troops.

(b) May replace transports with:
 Hågglands Bv-202 Arctic Warfare Vehicle CWNO-12

(c) 5th, 14th & 15th Brigades had SP Field Artillery Battalions equipped with M109A3GN self-propelled 155mm howitzers. 6th and 13th Brigades had Field Artillery Battalions equipped with M114 155mm howitzers. 1st, 3rd, 7th, 8th and Vestlandet Brigades had Light Field Artillery Battalions equipped with M101 105mm howitzers.



(a) Norway had three Armoured Battalions – one in each of the Type 90 Brigades. Brigade North and 12th Brigade were equipped with Leopard 1A1NO and had **x2** Armoured Squadrons, while Brigade South was equipped with M48A5 and had **x3** Armoured Squadrons.

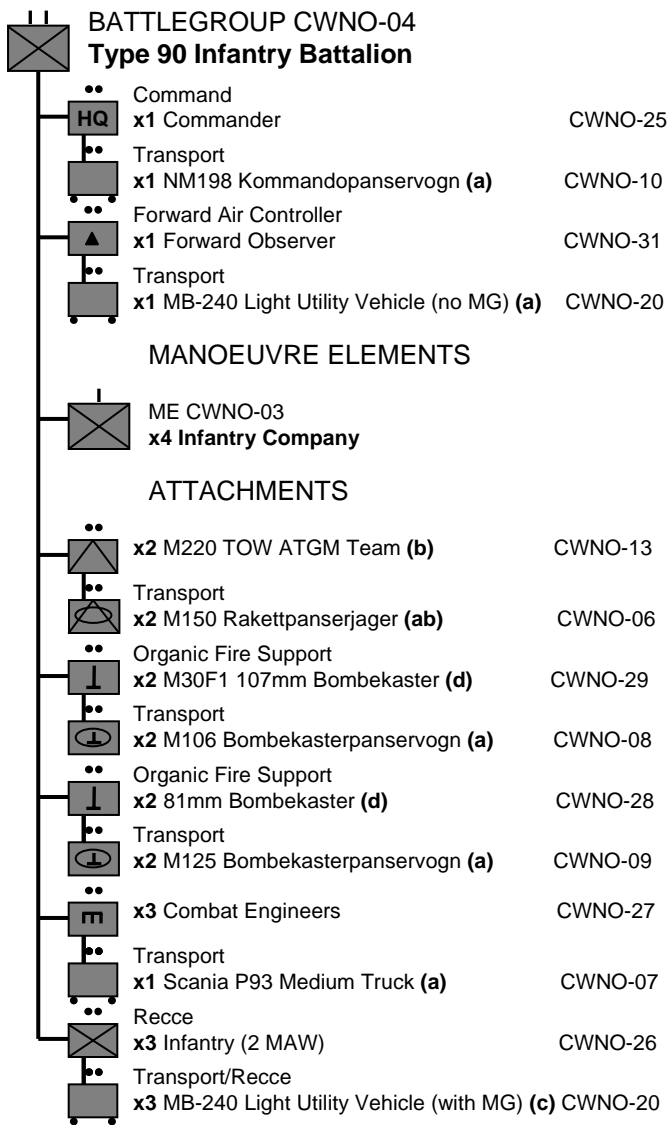
(b) In Brigade South: Replace Leopard with:
M48A5 Patton 105mm Medium Tank CWNO-02

(c) From mid-1980s: Replace TOW ATGM Teams and M150s with:
x2 NM142 Rakettpanserjager TOW 2 Vehicle CWNO-07

(d) One source suggests that one of the battalion's two Mortar Platoons was equipped with 81mm mortars. In which case, replace **x2** 107mm Mortars and **x2** M106 with:
x2 81mm Bombekaster CWNO-28
x2 M125 81mm Bombekasterpanservogn CWNO-09

(e) From early 1980s: May replace M113 with:
NM135 'Stormpanservogn' 20mm APC CWNO-04

(f) Mortars may be fired from their transports.

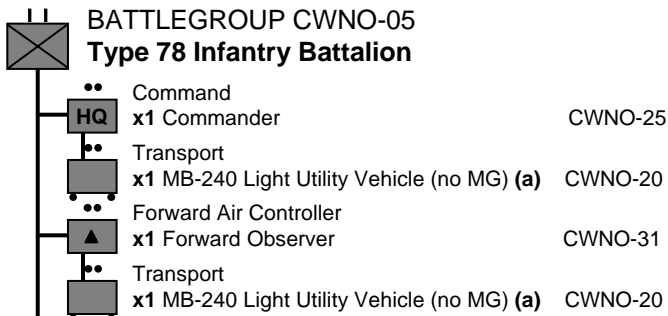


(a) May replace transport with:
Hägglunds Bv-202 Arctic Warfare Vehicle CWNO-12

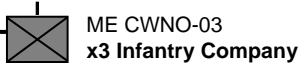
(b) From mid-1980s: Replace TOW ATGM Teams and M150s with:
x2 NM142 Rakettpanserjager TOW 2 Vehicle CWNO-07
However, it would appear that the M220 TOW launchers were retained, mounted on Bv-202, after the introduction of NM-142 for Arctic warfare use.

(c) May replace recce MB-240s with:
All-Terrain Motorcycles CWNO-23
Snowmobiles CWNO-19

(d) Mortars may be fired from their transports; whether M106, M125 or Bv-202.



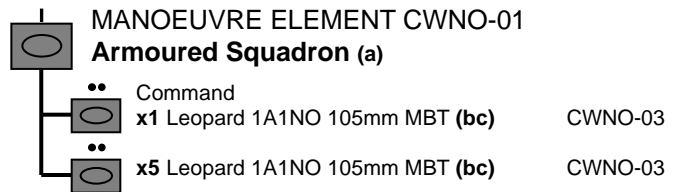
MANOEUVRE ELEMENTS



ATTACHMENTS



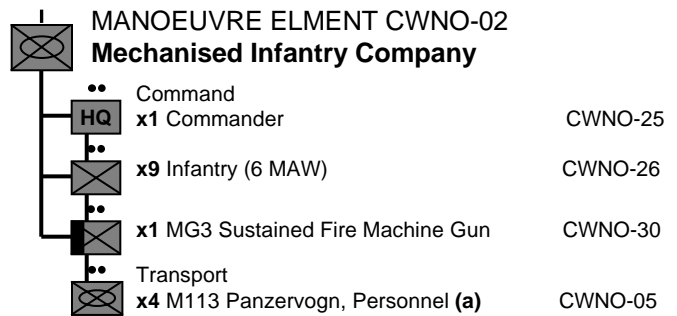
- (a) May replace transport with:
Häggglunds Bv-202 Arctic Warfare Vehicle CWNO-12
- (b) May replace 106mm Recoilless Rifles with:
M220 TOW ATGM Team (c) CWNO-13
- (c) 106mm Recoilless Rifles and M220 TOW ATGMs may be fired from transports; Whether MB-240 or Bv-202.
- (d) May replace recce MB-240s with:
All-Terrain Motorcycles CWNO-23
Snowmobiles CWNO-19
- (e) May replace x2 81mm mortars with:
M30F1 107mm Bombekaster CWNO-29



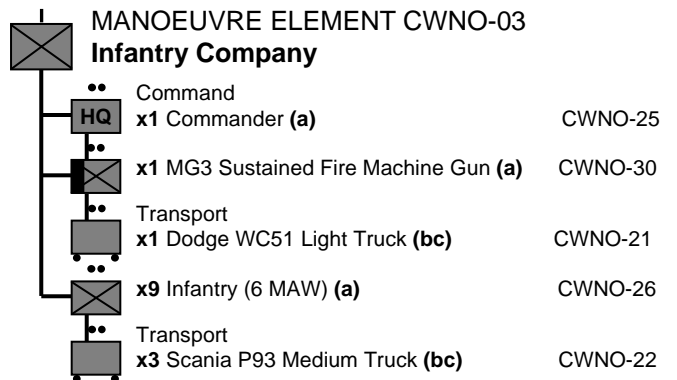
(a) The Norwegian Army had three independent Armoured Squadrons in addition to the three Armoured Regiments. The Posanger Defence Area (Finnmark) and the Akershus Defence District (Östlandet) each had a squadron of Leopards, while the Rogaland Defence District (Oslo) had a squadron of M48.

(b) In Brigade South or the Rogaland Independent Armoured Squadron: Replace Leopards with:
M48A5 Patton 105mm Medium Tank CWNO-02

(c) In the Rogaland Independent Armoured Squadron: add x2 M48A5.



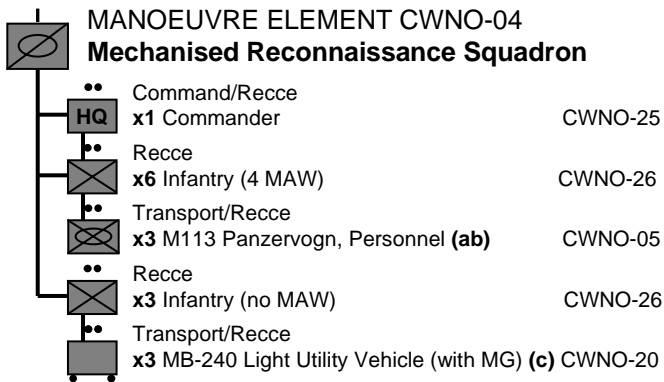
(a) From early 1980s: May replace these M113s with:
NM135 'Stormpanservogn' 20mm APC CWNO-04



(a) May replace all elements with:
Ski Troops (treat as cyclists or cavalry) CWNO-23

(b) In Type 78 Brigades there was often only enough motor transport in the Brigade to move one battalion at a time.

(c) In winter conditions may replace all transport with:
x4 Häggglunds Bv-202 Arctic Warfare Vehicle CWNO-12



(a) From early 1980s in Type 90 Brigades: Replace M113s with:
NM135 'Stormpanservogn' 20mm APC CWNO-04

(b) May replace with:
Hägglunds Bv-202 Arctic Warfare Vehicle CWNO-12

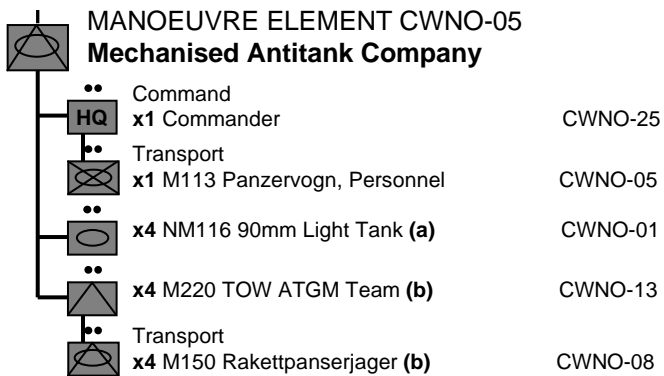
(c) May replace MB-240s with:
All-Terrain Motorcycles CWNO-23
Snowmobiles CWNO-19



(a) May replace NM45 20mm guns and associated transport with:
Bofors L60 40mm Antiaircraft Gun CWNO-18
Scania P93 Medium Truck CWNO-22

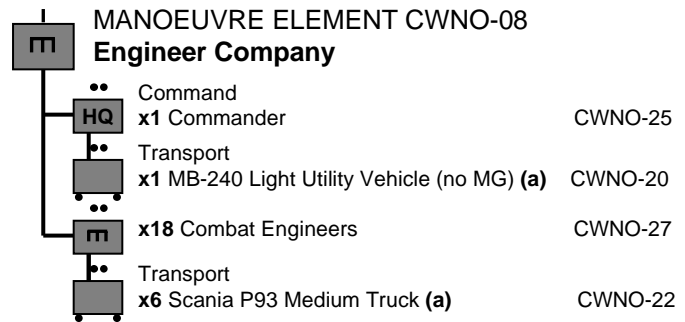
(b) May replace x6 Antiaircraft guns with:
RBS-70 SAM Team CWNO-15

(c) In addition to the companies attached directly to Brigades, there were 22 independent Light Antiaircraft Companies. These units probably did not have RBS-70 SAMs.

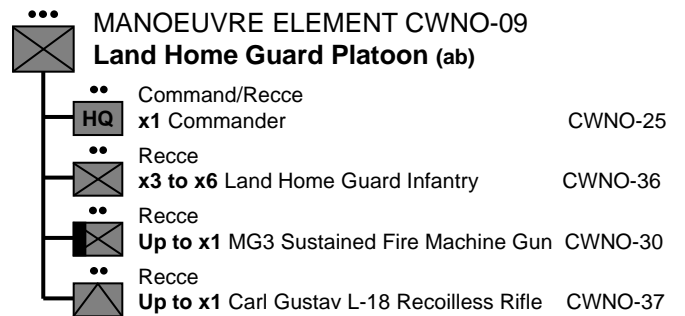


(a) May replace NM116 Light Tanks in a very few brigades with:
M48A5 Patton 105mm Medium Tank CWNO-03
(N.B. I have only found M48s used in this role in Brigade South – a Type 90 Brigade)

(b) From mid-1980s: Replace TOW ATGM Teams and M150s with:
x4 NM142 Rakettpanserjager TOW 2 Vehicle CWNO-09

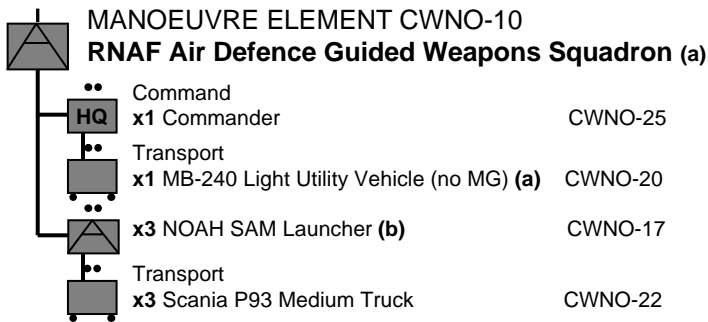


(a) May replace with:
Hägglunds Bv-202 Arctic Warfare Vehicle CWNO-12



(a) Norway had 470 Land Home Guard Platoons, which reported to the Defence Districts. Some Home Guard platoons were organised as Antiaircraft Batteries. Organisation was probably x3 20mm or 40mm guns, with minimal motor transport.

(b) If 2-4 Home Guard Platoons are fielded, they must be grouped as a single company ME (only one Commander may be fielded – delete the 'spares'). Note that as their local knowledge would most likely be invaluable to regular Norwegian/NATO forces in the harsh terrain of Norway, they would most likely have been employed as scouts. I have therefore classed them as Recce troops.

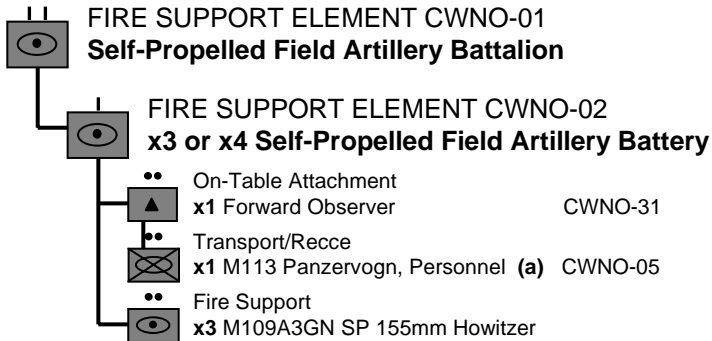


(a) The RCAF had six such mobile SAM squadrons, as well as four fixed Nike-Hercules Squadrons, though the latter were mainly concerned with theatre rather than tactical air defence.

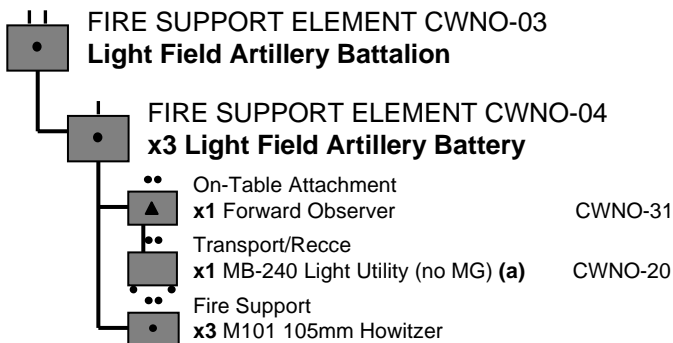
(b) The NOAH SAM is a variant of the I-Hawk.



(a) May replace with:
 Hägglunds Bv-202 Arctic Warfare Vehicle CWNO-12



(a) May replace with:
 Hägglunds Bv-202 Arctic Warfare Vehicle CWNO-12



(a) May replace with:
 Hägglunds Bv-202 Arctic Warfare Vehicle CWNO-12

Norwegian Air Support Assets

The Royal Norwegian Air Force had five fast jet squadrons, initially equipped with F-104G Starfighters for air defence and NF-5A Freedom-Fighters as multi-role fighter-bombers. The F-104G Starfighters were soon replaced by F-16A Fighting Falcons, followed by some of the NF-5As. Ultimately, four of the five squadrons were re-equipped with F-16A by 1984, with one squadron retaining NF-5A until the end of the Cold War. However, the newly-equipped F-16A squadrons were nowhere near as strong as they had been when operating the older types.

In summary; by 1989 the RCAF had four squadrons of F-16A, each with **x8** aircraft, and one squadron of NF-5A with between **x10** and **x15** aircraft.

The RCAF also had three combat helicopter squadron with a total of **x10** Bell 412 Utility Helicopters and **x6** UH-1B Iroquois.

North, South, 5th, 6th, 12th & 13th Brigades each had a flight of **x1** Cessna O-1A Bird Dog Air Observation Post, operated by the Army for artillery observation and forward air control duties. There were a further **x2** O-1A Bird Dogs in reserve.

Norwegian Card List

(Annotations indicate available 15mm or 1/100th models: 'QRF' = QRF Models/LKM Direct, 'SOG' = Skytrex/Old Glory, 'PP' = Peter Pig, 'QC' = Quality Castings/Old Glory 15s, 'BF' = Battlefront Miniatures/Flames of War)

CWNO-01 – NM116 90mm Light Tank	(modified M24 Chaffee)
CWNO-02 – M48A5 Patton 105mm Medium Tank	SOG, QRF
CWNO-03 – Leopard 1A1NO 105mm Main Battle Tank	
CWNO-04 – NM135 Stormpanservogn 20mm Armoured Personnel Carrier	(M113 with 20mm turret added)
CWNO-05 – M113 Panservogn, Personnel Armoured Personnel Carrier	SOG, QRF, PP
CWNO-06 – M150 Rakettpanserjager TOW ATGM Carrier	SOG, QRF
CWNO-07 – NM142 Rakettpanservogn TOW2 ATGM Vehicle	(near-identical to Canadian M113 TUA)
CWNO-08 – M106 Bombekasterpanservogn 107mm Mortar Carrier	QRF
CWNO-09 – M125 Bombekasterpanservogn 81mm Mortar Carrier	QRF
CWNO-10 – NM198 Kommandopanservogn Command Vehicle	QRF, SOG, PP, QC (M577 Command Vehicle)
CWNO-11 – NM195 Luftvernpanservogn RBS-70 SAM Carrier	(M113 with mounting to fire RBS-70 MANPADS when mounted)
CWNO-12 – Hägglunds Bv-202 Arctic Warfare Vehicle	
CWNO-13 – M220 TOW ATGM Team	QRF
CWNO-14 – 106mm Recoilless Rifle	QRF, PP
CWNO-15 – RBS-70 SAM Team	
CWNO-16 – NOAH SAM (I-Hawk)	QC
CWNO-17 – NM45 20mm Antiaircraft Gun	
CWNO-18 – Bofors L60 40mm Antiaircraft Gun	
CWNO-19 – Snowmobile	
CWNO-20 – Mercedes MB-240 G-Wagen Light Utility Vehicle	QRF (Peugeot P4 – licence built G-Wagen)
CWNO-21 – Dodge WC-51 Light Truck	SOG, BF, QRF
CWNO-22 – Scania P93 Medium Truck	
CWNO-23 – All-Terrain Motorcycles	
CWNO-24 – Ski Troops	
CWNO-25 – Commander	
CWNO-26 – Infantry (LAW & MAW)	
CWNO-27 – Combat Engineers	
CWNO-28 – 81mm Bombekaster	
CWNO-29 – M30F1 107mm Bombekaster	
CWNO-30 – MG3 Sustained Fire Machine Gun	
CWNO-31 – Forward Observer	
CWNO-32 – Bell 412 Utility Helicopter	Italeri, Revell, Corgi
CWNO-33 – NF-5A Freedom-Fighter Fighter-Bomber	Italeri, Revell
CWNO-34 – F-16A Fighting Falcon Fighter-Bomber	Revell
CWNO-35 – F-104G Starfighter Fighter-Bomber	Italeri, Revell, Heller, Tamiya
CWNO-36 – Land Home Guard Infantry	
CWNO-37 – Carl-Gustav L-18 57mm Recoilless Rifle	
CWNO-38 – Cessna O-1A Bird Dog Air Observation Post	