

Bulgarian TO&Es 1980-89 v1.0

BATTLEGROUP CWBU-01 Bulgarian Motor Rifle Division 1980s (ag)

BATTLEGROUPS



BATTLEGROUP CWBU-04
x1 Tank Regiment



BATTLEGROUP CWBU-05
x1 Motor Rifle Regiment (Tracked)



BATTLEGROUP CWBU-06
x1 Motor Rifle Regiment (Wheeled)



BATTLEGROUP CWBU-07
x1 Motor Rifle Regiment (Lorried)



BATTLEGROUP CWBU-09
x1 Reconnaissance Battalion



BATTLEGROUP CWBU-15
x1 Antitank Battalion

MANOEUVRE ELEMENTS



x1 Engineer Battalion (e)



MANOEUVRE ELEMENT CWBU-15
x5 SAM Battery

FIRE SUPPORT ELEMENTS



FIRE SUPPORT ELEMENT CWBU-01
x1 Divisional Artillery Regiment

ARMY TROOPS (b)



BATTLEGROUP CWBU-03
Up to x1 Independent Tank Brigade (c)



FIRE SUPPORT ELEMENT CWBU-08
Up to x1 Army Artillery Regiment



Up to x1 Engineer Brigade (d)



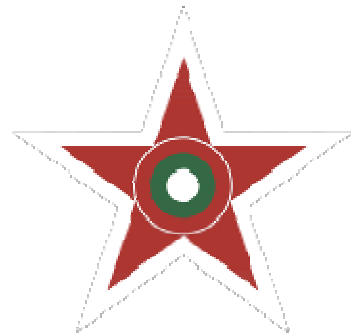
BATTLEGROUP CWBU-09
Up to x1 Reconnaissance Battalion



MANOEUVRE ELEMENT CWBU-16
Up to x4 Antiaircraft Battery



BATTLEGROUP CWBU-15
Up to x1 Antitank Battalion



(a) Bulgaria was regarded by the USSR and NATO alike, as the most reliable of the Warsaw Pact nations. However, Bulgaria was not a wealthy country and its relative 'backwater' status meant that it received little funding from the USSR. Consequently, the Bulgarian People's Army had no Tank Divisions and only eight Motor Rifle Divisions; 1st Guards, 2nd, 3rd, 7th, 17th, 18th, 19th and 28th Motor Rifle Divisions. However, three of these (1st Guards, 18th and 19th) were high-turnover training formations with very low peacetime manning and obsolete equipment (see BG CWBU-02).

(b) The Bulgarian People's Army formed the Warsaw Pact's 'Bulgarian Front' which was 100% Bulgarian, with no Soviet formations or combat support units present. The Front was divided into two Combined Arms Armies, designated 2nd & 3rd Bulgarian Armies. However, as can be seen here, neither Army had the full range of assets found in a Soviet Combined Arms Army. Front assets included x1 Air Assault Regiment (BG CWBU-08), x2 Army Artillery Regiments (FSE CWBU-08), x4 Antiaircraft Batteries (ME CWBU-16), x10 SAM Battery (ME CWBU-15) and an Assault Helicopter Regiment consisting of x4 Mi-2 'Hoplite' Observation Helicopter (CWWP-116), x8 Mi-4 'Hound' Transport Helicopter (CWWP-117), x8 Mi-8 'Hip' Assault Transport Helicopter (CWWP-118) and x12 Mi-24 'Hind D' Attack Helicopter (CWWP-122). Again, this fell well short of the range of assets found in a Soviet Front.

(c) The Bulgarian Army had no Tank Divisions. Instead, it had five independent Tank Brigades (9th, 5th, 11th, 13th and 24th). Each Tank Brigade would normally operate alongside one of the five regular Motor Rifle Divisions.

(d) Lots and lots of engineering assets that would not normally feature in a game.

(e) An Army Reconnaissance Battalion was generally organised exactly the same as a Divisional Reconnaissance Battalion, though there were many organisational differences in Warpac recce units at all levels and it remains a very complicated area of research.


(f) The Divisional Engineer Battalion had a single Divisional Sapper Company that could be considered an ME for game purposes (ME CWBU-19), while the rest of the battalion consisted of road-building, bridging, amphibian, position preparation and demolition equipment, which is unlikely to feature very heavily in a game.

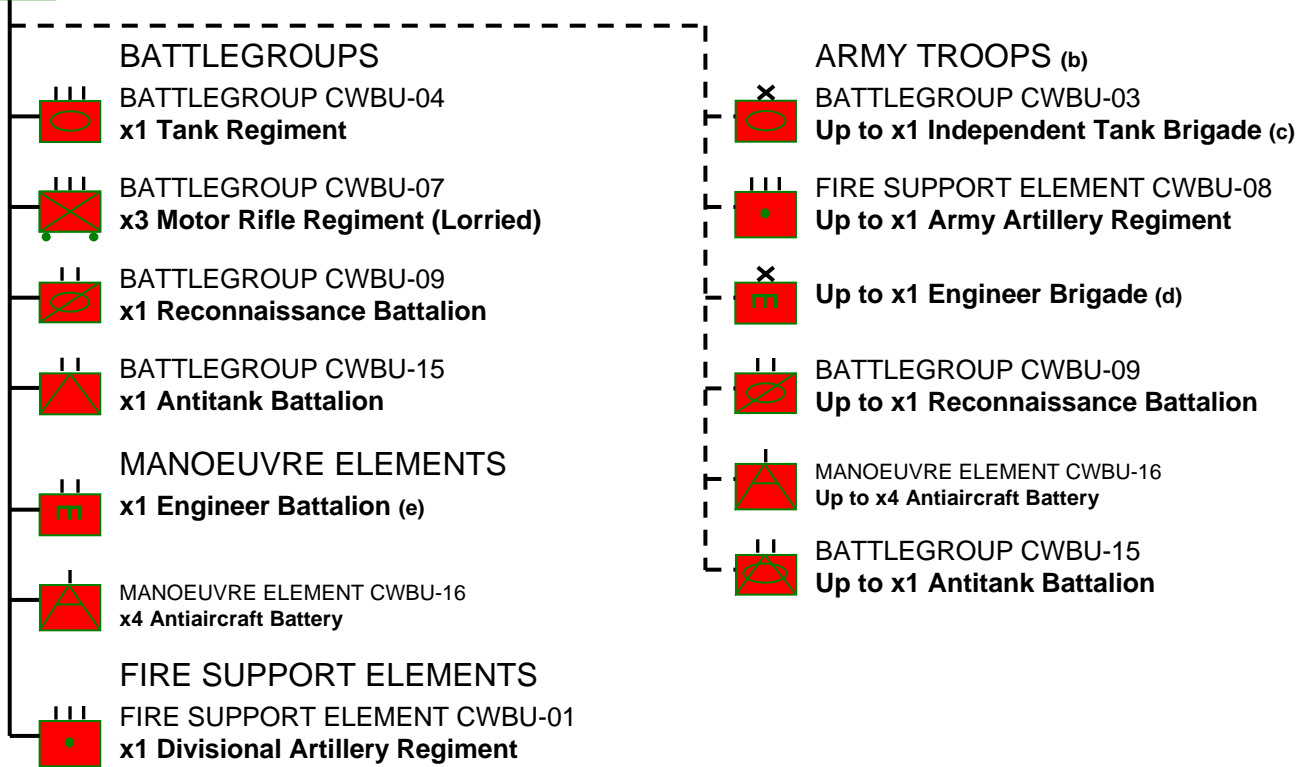
(g) There is no mention in any of my sources of the Helicopter Squadron that would normally be found in a Warsaw Pact division. Of course, this does not mean that it was not present. May therefore add:

x2 Mi-2 'Hoplite' Observation Helicopter	CWWP-116
x2 Mi-4 'Hound' Transport Helicopter (h)	CWWP-117
x2 Mi-24 'Hind A' Attack Helicopter (i)	CWWP-121

(h) May replace Mi-4 'Hound' with:
Mi-8 'Hip C' Transport Helicopter CWWP-119

(i) May replace Mi-24 'Hind A' with:
Mi-24 'Hind D' Attack Helicopter CWWP-122

 **BATTLEGROUP CWBU-02**
Bulgarian Motor Rifle (Training) Division 1980s (a)



(a) On paper, the Bulgarian People's Army had eight Motor Rifle Divisions; 1st Guards, 2nd, 3rd, 7th, 17th, 18th, 19th and 28th Motor Rifle Divisions. However, three of these (1st Guards, 18th and 19th) were high-turnover training formations with very low peacetime manning and obsolete equipment.

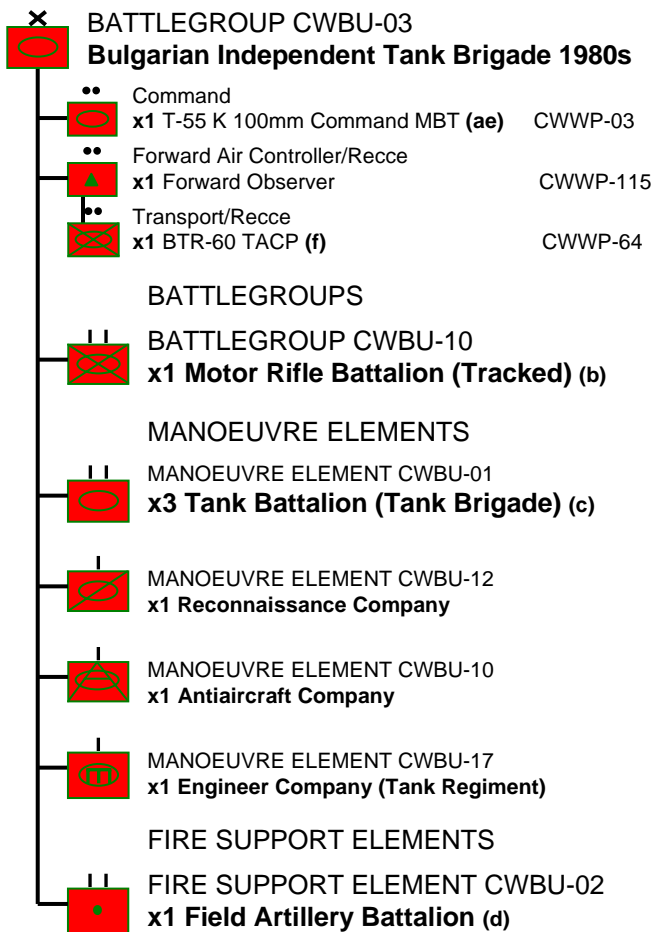
(b) The Bulgarian Army formed the Warsaw Pact's 'Bulgarian Front' which was 100% Bulgarian. The Front was divided into two Combined Arms Armies, designated 2nd & 3rd Bulgarian Armies. Neither Army had the full range of assets found in a Soviet Combined Arms Army. Front assets included **x1 Air Assault Regiment** (BG CWBU-08), **x2 Army Artillery Regiments** (FSE CWBU-08), **x4 Antiaircraft Batteries** (ME CWBU-16), **x10 SAM Battery** (ME CWBU-15) and an **Assault Helicopter Regiment** consisting of **x4 Mi-2 'Hoplite'** Observation Helicopter (CWWP-116), **x8 Mi-4 'Hound'** Transport Helicopter (CWWP-117), **x8 Mi-8 'Hip'** Assault Transport Helicopter (CWWP-118) and **x12 Mi-24 'Hind D'** Attack Helicopter (CWWP-122). There was also a single **Marine Infantry Battalion** (BG CWBU-14) available for operations on the Black Sea coast.

(c) The Bulgarian Army had no Tank Divisions. Instead, it had five independent Tank Brigades (9th, 5th, 11th, 13th and 24th). Each Tank Brigade would normally operate alongside one of the five regular Motor Rifle Divisions, though there is the slim chance that they might have offered support to the Training Divisions, should they ever take to the field.

(d) Lots and lots of engineering assets that would not normally feature in a game.

(e) An Army Reconnaissance Battalion was generally organised exactly the same as a Divisional Reconnaissance Battalion, though there were many organisational differences in Warpac recce units at all levels and it remains a very complicated area of research.

(f) The Divisional Engineer Battalion had a single Divisional Sapper Company that could be considered an ME for game purposes (ME CWBU-19), while the rest of the battalion consisted of road-building, bridging, amphibian, position preparation and demolition equipment, which is unlikely to feature very heavily in a game.



(a) Mid-1980s: Replace Brigade Commander's tank with:
 T-72 MK 125mm Command Tank **(e)** CWWP-11

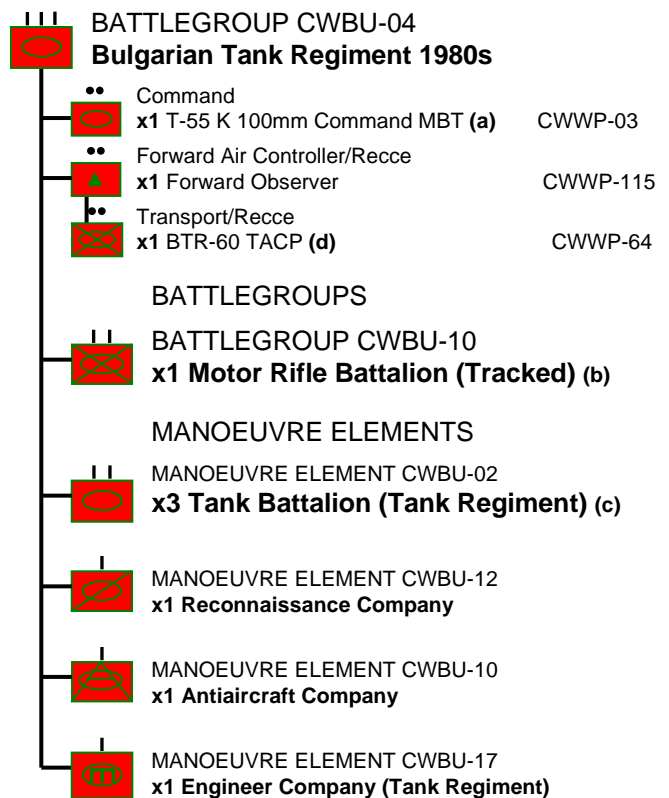
(b) Unlike the Soviet Independent Tank Brigades, Bulgarian Tank Brigades had an integral Motor Rifle Battalion. These battalions were probably re-equipped with the BMP-1 Infantry Combat Vehicles (two battalions' worth) that Bulgaria purchased from the USSR, as well as the home-grown BMP-23 (three battalions' worth being built).

(c) These Tank Battalions were stronger than those of Tank Regiments, having four companies instead of three. Note that Bulgaria purchased enough T-72 M tanks to equip five battalions. It seems likely that one battalion in each of the five Tank Brigades would have been converted to T-72 M.

(d) Although I can't find any reference to the Bulgarians having self-propelled artillery during the 1980s, they were manufacturing significant numbers of 2S1 SP 122mm howitzers. The Field Artillery Battalion may therefore be upgraded to a Self-Propelled Field Artillery Battalion during the mid/late 1980s (see FSE CWBU-02).

(e) Battalion and Regimental command tanks ('K' models) do not have AAMGs.

(f) May replace with:
 MTLB Armoured Carrier CWWP-90



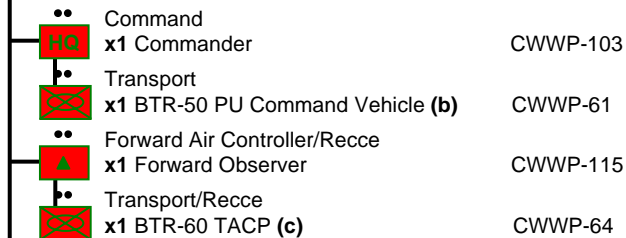
(a) Battalion and Regimental command tanks ('K' models) do not have AAMGs.

(b) The Bulgarians only acquired enough BMP-1 and BMP-23 Infantry Combat Vehicles to equip five battalions, so it seems likely that they were used to equip the Motor Rifle Battalions of the five Tank Brigades. The remaining tracked Motor Rifle Regiments probably soldiered on with their ancient BTR-50 APCs until replacing them with home-grown MT-LB armoured carriers (of which Bulgaria built over 1,000).

(c) In Training Motor Rifle Divisions, one Tank Battalion in each Tank Regiment will be equipped with T-34 tanks. The remainder are all equipped with T-55 (assuming that the five battalions of T-72 went to the Independent Tank Brigades).

(d) May replace with:
 MTLB Armoured Carrier CWWP-90

 **BATTLEGROUP CWBU-05**
Bulgarian Motor Rifle Regiment (Tracked) (a)




BATTLEGROUPS

 **BATTLEGROUP CWBU-10**
x3 Motor Rifle Battalion (Tracked)

MANOEUVRE ELEMENTS

 **MANOEUVRE ELEMENT CWBU-03**
x1 Tank Battalion (Motor Rifle Regt)

 **MANOEUVRE ELEMENT CWBU-12**
x1 Reconnaissance Company

 **MANOEUVRE ELEMENT CWBU-10**
x1 Antiaircraft Company

 **MANOEUVRE ELEMENT CWBU-18**
x1 Engineer Company (Motor Rifle Regiment)

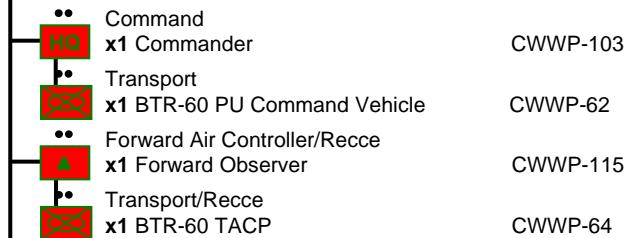
 **MANOEUVRE ELEMENT CWBU-09**
x1 Antitank Company

(a) Bulgarian Motor Rifle Regiments do not seem to have had a permanently-assigned Field Artillery Battalion. However, a battalion would undoubtedly have been assigned from the Divisional Artillery Regiment.

(b) May replace regimental commander's BTR-50 with:
 MTLB Armoured Carrier CWWP-90

(c) May replace FAC's BTR-60 with:
 BTR-50 PK Armoured Personnel Carrier CWWP-28
 MTLB Armoured Carrier CWWP-90

 **BATTLEGROUP CWBU-06**
Bulgarian Motor Rifle Regiment (Wheeled) (a)



BATTLEGROUPS

 **BATTLEGROUP CWBU-11**
x3 Motor Rifle Battalion (Wheeled)

MANOEUVRE ELEMENTS

 **MANOEUVRE ELEMENT CWBU-03**
x1 Tank Battalion (Motor Rifle Regt)

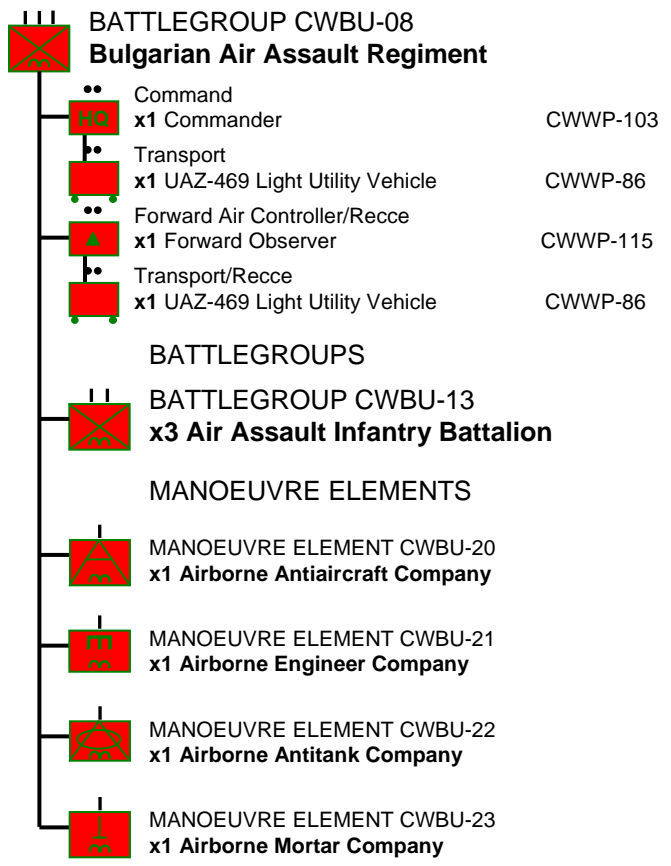
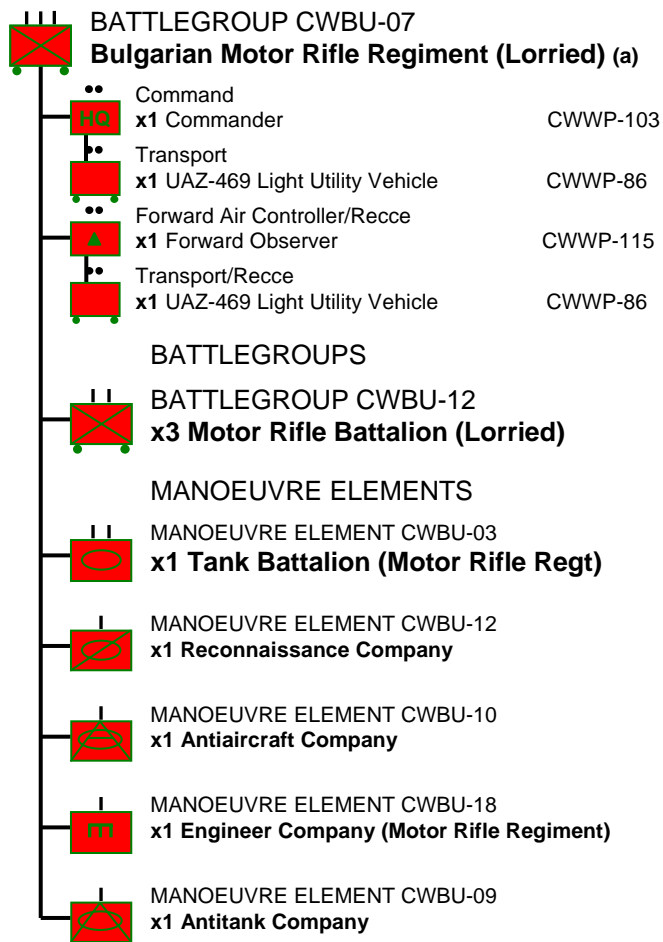
 **MANOEUVRE ELEMENT CWBU-12**
x1 Reconnaissance Company

 **MANOEUVRE ELEMENT CWBU-10**
x1 Antiaircraft Company

 **MANOEUVRE ELEMENT CWBU-18**
x1 Engineer Company (Motor Rifle Regiment)

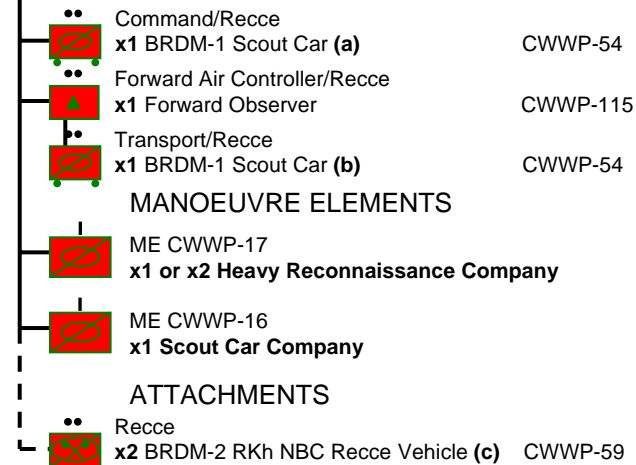
 **MANOEUVRE ELEMENT CWBU-09**
x1 Antitank Company

(a) Bulgarian Motor Rifle Regiments do not seem to have had a permanently-assigned Field Artillery Battalion. However, a battalion would undoubtedly have been assigned from the Divisional Artillery Regiment.



(a) Bulgarian Motor Rifle Regiments do not seem to have had a permanently-assigned Field Artillery Battalion. However, a battalion would undoubtedly have been assigned from the Divisional Artillery Regiment.

BATTLEGROUP CWBU-09 Reconnaissance Battalion



(a) May replace command vehicle with:

BTR-40 Scout Car	CWWP-26
BRDM-2 U Command Scout Car	CWWP-60
MTLB Armoured Carrier	CWWP-90

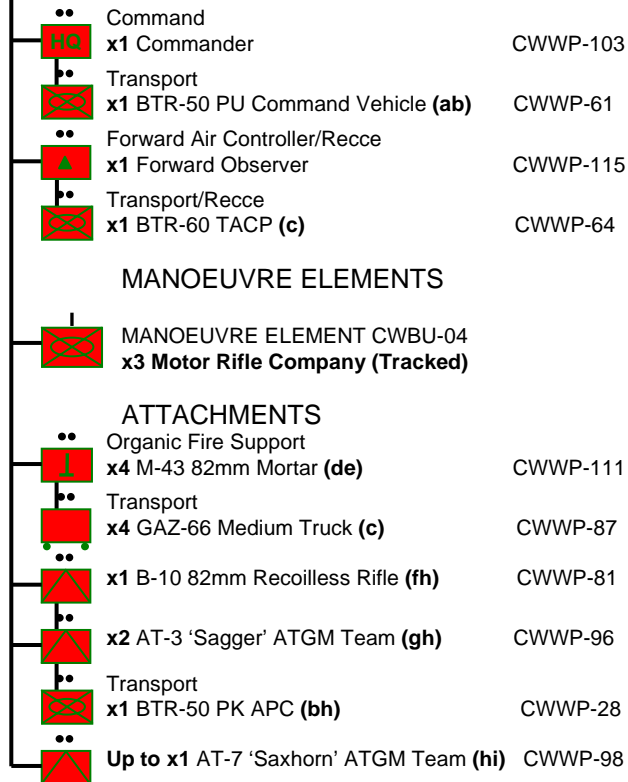
(b) May replace FAC's transport with:

BTR-40 Scout Car	CWWP-26
BTR-60 TACP	CWWP-64

(c) Late 1980s: May replace BRDM-2 RKh with:

MTLB-RHR NBC Recce Vehicle	use CWWP-90
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BATTLEGROUP CWBU-10 Motor Rifle Battalion (Tracked)



(a) In Tank Brigades from early 1980s: Replace BTR-50 APC with:
BMP-1 73mm Infantry Combat Vehicle CWWP-34

Alternative:

BMP-23 23mm Infantry Combat Vehicle	CWWP-38
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(b) In Motor Rifle Battalions that are not equipped with BMP, may replace BTR-50 APCs with:

MTLB Armoured Carrier	CWWP-90
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(c) May replace FAC's transport and/or Mortar Platoon transport with:

MTLB Armoured Carrier (e)	CWWP-90
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(d) May replace x2 or x4 M-43 82mm Mortars with:

M-43 120mm Mortar (e)	CWWP-113
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(e) The Bulgarians developed 82mm and 120mm self-propelled mortar carrier variants of the MTLB Carrier. However, I am not sure if these ever entered service with the Bulgarian Army during the 1980s. If they did, they would probably have seen service first in the BMP-equipped Motor Rifle Battalions of the Tank Brigades. Mortars may therefore be fired from their MTLBs when mounted in BMP-equipped battalions.

(f) B-10 82mm Recoilless Rifle may be replaced with:

SPG-9 73mm Recoilless Rifle	CWWP-80
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(g) Late 1980s: AT-3 'Sagger' ATGMs may be replaced with:

AT-4 'Spigot' ATGM Team	CWWP-97
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(h) In BMP-equipped battalions, delete all recoilless rifle and ATGM units and their transport (BMPs have their own ATGMs).

(i) AT-7 'Saxhorn' is only available in the late 1980s, to some units that have not been equipped with BMP. The AT-7 Team must be attached to one of the battalion's Motor Rifle Companies and is transported by the company transport.

**BATTLEGROUP CWBU-11
Motor Rifle Battalion (Wheeled)**

	Command x1 Commander	CWWP-103
	Transport x1 BTR-60 PU Command Vehicle (a)	CWWP-62
	Forward Air Controller/Recce x1 Forward Observer	CWWP-115
	Transport/Recce x1 BTR-60 TACP (a)	CWWP-64

MANOEUVRE ELEMENTS

 **MANOEUVRE ELEMENT CWBU-05
x3 Motor Rifle Company (Wheeled)**

ATTACHMENTS

	Organic Fire Support x4 M-43 82mm Mortar (b)	CWWP-111
	Transport x4 GAZ-66 Medium Truck (c)	CWWP-87
	x1 B-10 82mm Recoilless Rifle (e)	CWWP-81
	x2 AT-3 'Sagger' ATGM Team (f)	CWWP-96
	Transport x1 BTR-60 PB APC (d)	CWWP-28
	Up to x1 AT-7 'Saxhorn' ATGM Team (g)	CWWP-98

(a) May replace commander's and FAC's transport with obsolete vehicles:

BTR-40 Scout Car	CWWP-26
BTR-152 Armoured Personnel Carrier	CWWP-27

(b) May replace **x2** or **x4** M-43 82mm Mortars with:
M-43 120mm Mortar **(e)** CWWP-113

(c) May replace Mortar Platoon transport with:
MTLB Armoured Carrier CWWP-90





(d) May replace Antitank Platoon transport with obsolete vehicles:
BTR-152 Armoured Personnel Carrier CWWP-27
BTR-60 P Armoured Personnel Carrier CWWP-29
BTR-60 PA Armoured Personnel Carrier CWWP-30

(e) B-10 82mm Recoilless Rifle may be replaced with:
SPG-9 73mm Recoilless Rifle CWWP-80

(f) Late 1980s: AT-3 'Sagger' ATGMs may be replaced with:
AT-4 'Spigot' ATGM Team CWWP-97

(g) AT-7 'Saxhorn' is only available to a few units in the late 1980s. The AT-7 Team must be attached to one of the battalion's Motor Rifle Companies and is transported by the company transport.



**BATTLEGROUP CWBU-12
Motor Rifle Battalion (Lorried)**

	Command x1 Commander	CWWP-103
	Transport x1 UAZ-469 Light Utility Vehicle	CWWP-86
	Forward Air Controller/Recce x1 Forward Observer	CWWP-115
	Transport/Recce x1 UAZ-469 Light Utility Vehicle	CWWP-86

MANOEUVRE ELEMENTS

 **MANOEUVRE ELEMENT CWBU-06
x3 Motor Rifle Company (Lorried)**

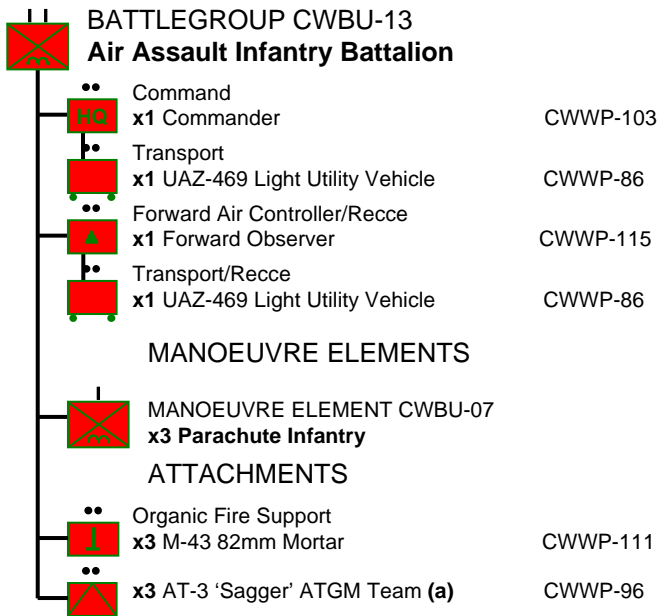
ATTACHMENTS

	Organic Fire Support x4 M-43 82mm Mortar (a)	CWWP-111
	Transport x4 GAZ-66 Medium Truck	CWWP-87
	x3 B-10 82mm Recoilless Rifle (b)	CWWP-81
	Transport x1 GAZ-66 Medium Truck	CWWP-87
	x3 ZPU-2 Twin 14.5mm AA Gun (c)	CWWP-162
	Transport x3 GAZ-66 Medium Truck (c)	CWWP-87

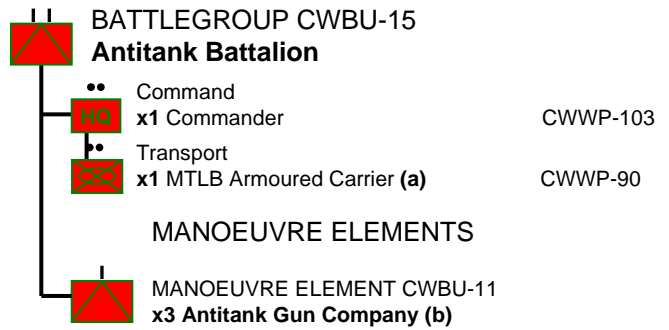
(a) May replace **x2** or **x4** M-43 82mm Mortars with:
M-43 120mm Mortar **(e)** CWWP-113

(b) May replace **x2** B-10 Recoilless Rifles with:
AT-3 'Sagger' ATGM Team CWWP-96

(c) ZPU-2 AA Guns are only present in those battalions that do not have man-portable SAMs in their Motor Rifle Companies. A battalion may not therefore, possess both AA guns AND light SAMs. See ME CWBU-06.

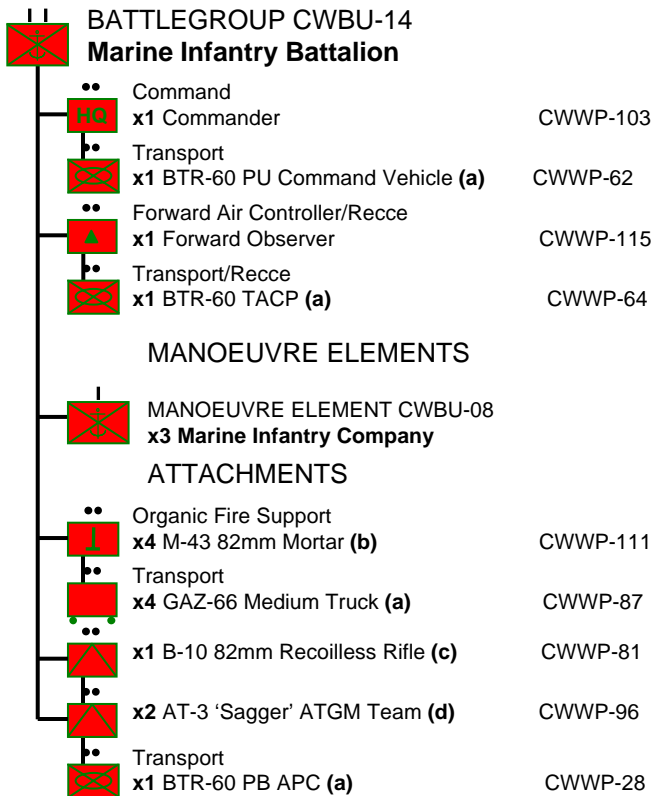


(a) Late 1980s: May replace AT-3 'Sagger' Teams with:
 AT-4 'Spigot' ATGM Team CWWP-97



(a) In training divisions, replace transport with:
 UAZ-469 Light Utility Vehicle CWWP-86

(b) In some units, may replace **x1** Antitank Gun Company with **x1** Antitank Company (ME CWBU-09).



(a) May replace some or all transport with:
 MTLB Armoured Carrier CWWP-90

(b) May replace **x2** or **x4** M-43 82mm Mortars with:
 M-43 120mm Mortar CWWP-113

(c) B-10 82mm Recoilless Rifle may be replaced with:
 SPG-9 73mm Recoilless Rifle CWWP-80

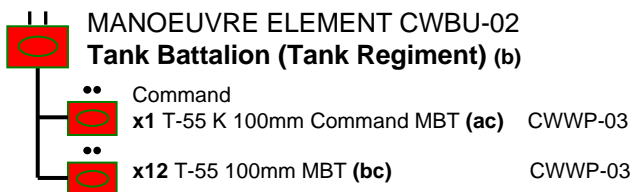
(d) Late 1980s: AT-3 'Sagger' ATGMs may be replaced with:
 AT-4 'Spigot' ATGM Team CWWP-97



(a) In early 1980s: The Bulgarians purchased sufficient T-72s for five Tank Battalions. It therefore seems likely that these tanks were used to re-equip one battalion per Tank Brigade. May therefore replace all T-55s with:
T-72 M 125mm Main Battle Tank CWWP-11

(b) Bulgarian Tank Battalions generally operate as single MEs, in line with Soviet doctrine. However, one company of x4 tanks may be detached from each Tank Battalion as a separate ME (designate one tank as the Company Commander).

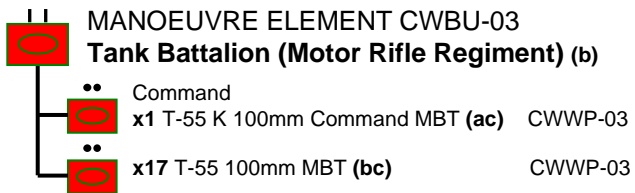
(c) Regimental and Battalion Command Tank ('K') variants do not have AAMGs.



(a) In Training Divisions, the third battalion of the division's tank regiment was equipped with T-34s. Therefore, replace all T-55s in those battalions with:
T-34/85 85mm Medium Tank CWWP-02

(b) Bulgarian Tank Battalions generally operate as single MEs, in line with Soviet doctrine. However, one company of x4 tanks may be detached from each Tank Battalion as a separate ME (designate one tank as the Company Commander).

(c) Regimental and Battalion Command Tank ('K') variants do not have AAMGs.



(a) In Training Divisions, replace all T-55s with:
T-34/85 85mm Medium Tank CWWP-02

(b) Bulgarian Tank Battalions generally operate as single MEs, in line with Soviet doctrine. However, the battalion may be split into three Tank Company MEs, each of x6 tanks (designate one tank in each ME as the Company Commander). Each Tank Company ME must be attached to one of the regiment's Motor Rifle Battalions.

(c) Regimental and Battalion Command Tank ('K') variants do not have AAMGs.



(a) Mid-1980s: May replace SA-7 'Grail' SAM Team with:
SA-14 'Gremlin' SAM Team CWWP-100
Or in late 1980s with:
SA-16 'Gimlet' SAM Team CWWP-101

(b) In Tank Brigades from early 1980s: Replace BTR-50 APC with:
BMP-1 73mm Infantry Combat Vehicle CWWP-34
Alternative:
BMP-23 23mm Infantry Combat Vehicle CWWP-38

(c) BMPs (even the home-grown Bulgarian BMP-23) were very expensive compared to the more traditional types of APC. Consequently, the Bulgarians began manufacturing the much cheaper MTLB under licence. May therefore replace the BTR-50 APCs with:
MTLB Armoured Carrier CWWP-90



(a) Mid-1980s: May replace SA-7 'Grail' SAM Team with:
SA-14 'Gremlin' SAM Team CWWP-100
Or in late 1980s with:
SA-16 'Gimlet' SAM Team CWWP-101

(b) The Bulgarians remained very short of APCs, so obsolete models remained in service well beyond their sell-by date. May therefore replace the BTR-60 PBs in some units with:
BTR-152 Armoured Personnel Carrier CWWP-27
BTR-60 P Armoured Personnel Carrier CWWP-28
BTR-60 PA Armoured Personnel Carrier CWWP-29

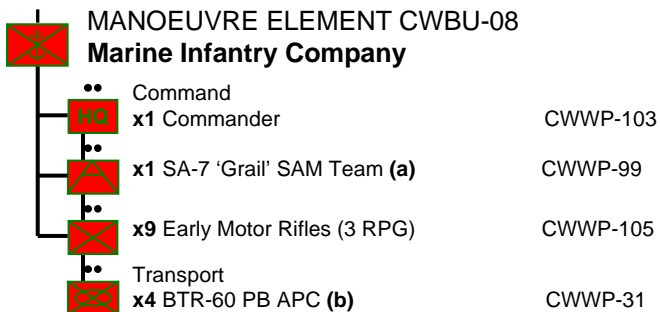


(a) It is entirely likely that SAMs and other heavy weapons were in short supply to units so low down the pecking order. See BG CWBU-12.



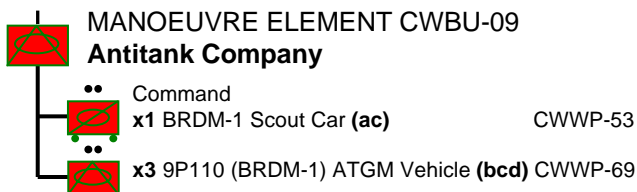
- (a) Mid-1980s: May replace SA-7 'Grail' SAM Team with:
SA-14 'Gremlin' SAM Team CWWP-100
Or in late 1980s with:
SA-16 'Gimlet' SAM Team CWWP-101

(b) AT-7 'Saxhorn' is only available in late 1980s.



- (a) Mid-1980s: May replace SA-7 'Grail' SAM Team with:
SA-14 'Gremlin' SAM Team CWWP-100
Or in late 1980s with:
SA-16 'Gimlet' SAM Team CWWP-101

(b) Late 1980s: One source suggests that the Bulgarian Marines switched to tracked APCs, though most state that the BTR-60 remained. May therefore replace BTR-60s with:
MTLB Tracked Carrier CWWP-90

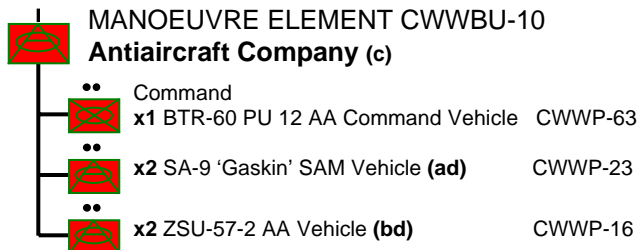


(a) May replace command vehicle with:
BRDM-2 U Command Scout Car CWWP-60

(b) May replace all 9P110 ATGM Vehicles with:
9P122 (BRDM-2/ AT-3 'Sagger') ATGM Vehicle CWWP-70
Or in late 1980s in some units with:
9P148 (BRDM-3/ AT-5 'Spandrel') ATGM Vehicle CWWP-71

(c) In some training units, replace this organisation with:
x1 Commander CWWP-103
x3 B-11 107mm Recoilless Rifle CWWP-82
x4 GAZ-69 Light Utility Vehicle use CWWP-86

(d) Regimental Antitank Companies may be split up as individual attachments to units within the regiment.



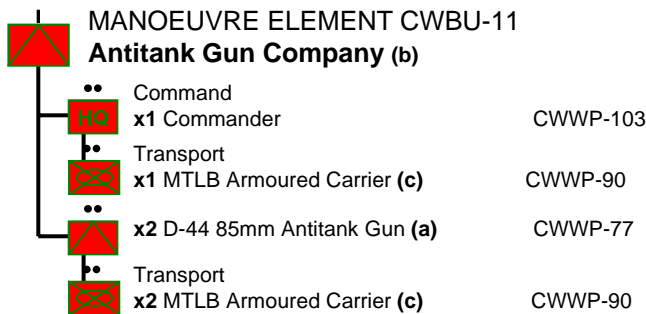
(a) From mid-1980s in the Tank Brigades: Replace SA-9 with:
SA-13 'Gopher' SAM Vehicle CWWP-25

(b) In the Tank Brigades: Replace ZSU-57-2 with:
ZSU-23-4 'Shilka' AA Vehicle CWWP-17

(c) In some units (particularly the training divisions), replace this organisation with the following:
x1 Commander CWWP-103
x2 SA-7 'Grail' SAM Team (de) CWWP-99
x3 UAZ-469 Light Utility Vehicle CWWP-86
x2 ZU-23-2 Twin 23mm Antiaircraft Gun (d) CWWP-83
x2 GAZ-66 Medium Truck CWWP-87

(d) Regimental Antiaircraft Companies may be split up as individual attachments to other units within the regiment.

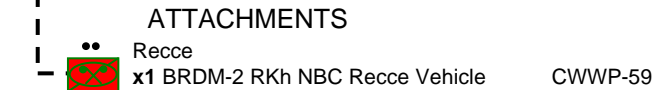
(e) Mid-1980s: May replace SA-7 'Grail' SAM Team with:
SA-14 'Gremlin' SAM Team CWWP-100
Or in late 1980s with:
SA-16 'Gimlet' SAM Team CWWP-101



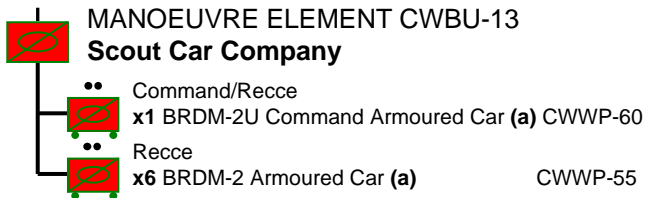
(a) In some divisions, may replace the antitank guns with:
x2 MT-12 100mm Antitank Gun CWWP-77

(b) Some Antitank Gun Companies were self-propelled and equipped with obsolete SU-100 Assault Guns. Replace this organisation with the following:
x1 Command SU-100 100mm Assault Gun CWWP-14
x2 SU-100 100mm Assault Gun CWWP-14

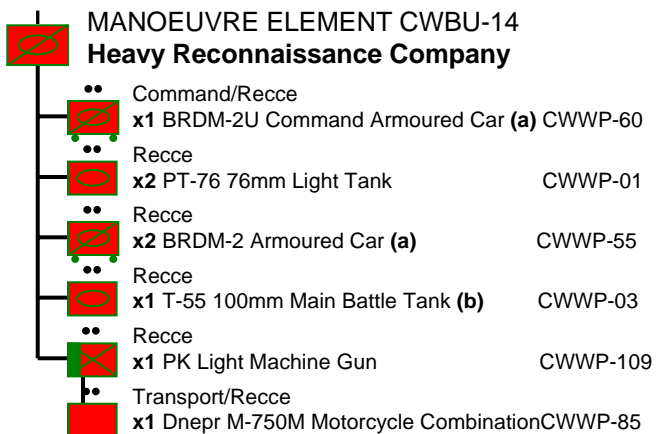
(c) In training divisions, replace transport with:
x1 UAZ-469 Light Utility Vehicle CWWP-86
x2 Ural 375 Heavy Truck CWWP-88



(a) The armoured cars may alternatively be obsolete types such as:
 BTR-40 Scout Car CWWP-26
 BRDM-1 Scout Car CWWP-54
 There was sometimes a dismountable element, in which case, add:
x1 Commander CWWP-103
x2 Early Motor Rifles (no RPG) CWWP-105

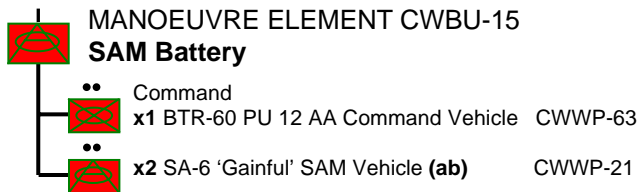


(a) The armoured cars may alternatively be obsolete types such as:
 BTR-40 Scout Car CWWP-26
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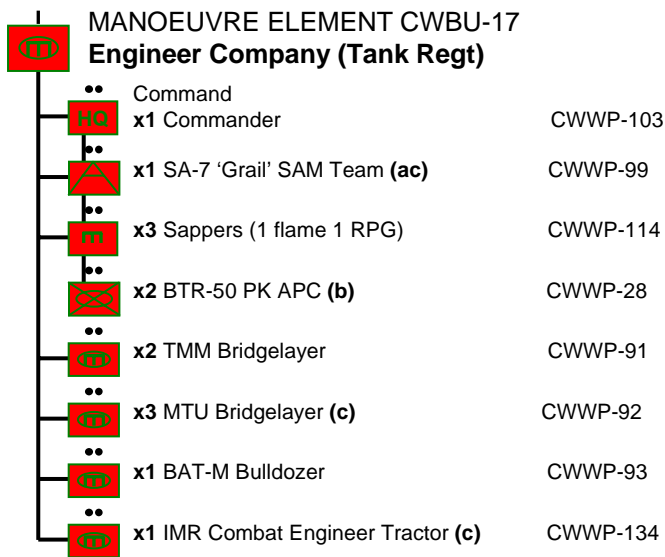
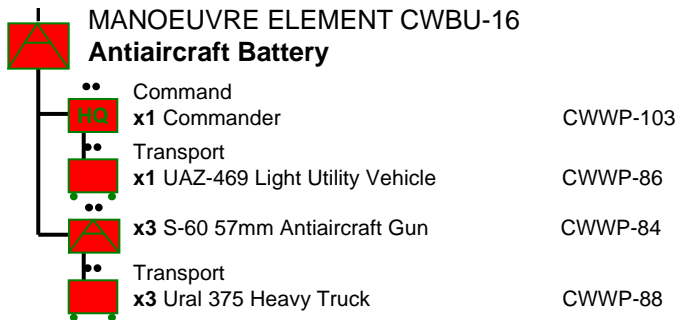
(a) The armoured cars may alternatively be obsolete types such as:
 BTR-40 Scout Car CWWP-26
 BRDM-1 Scout Car CWWP-54
 There was sometimes a dismountable element, in which case, add:
x1 Commander CWWP-103
x2 Early Motor Rifles (no RPG) CWWP-105

(b) In training divisions, replace T-55 with:
 T-34/85 85mm Medium Tank CWWP-01



(a) From mid-1980s: May replace SA-6 in a few units with:
 SA-8 'Gecko' SAM Vehicle CWWP-22

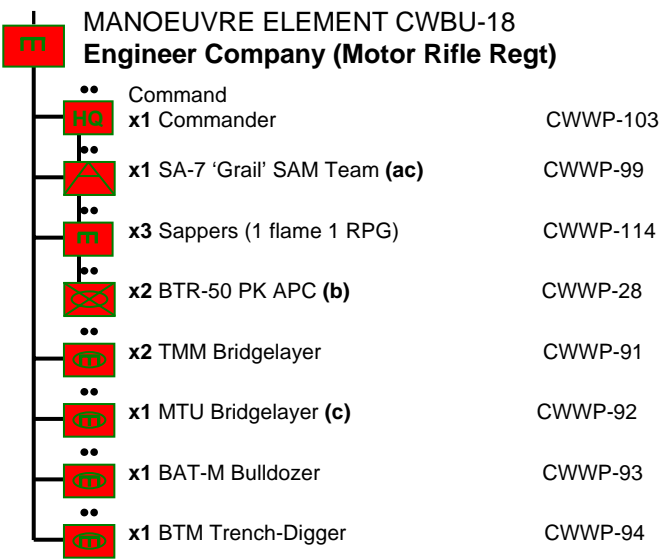
(b) In one of the two Army SAM Regiments, replace SA-6 with:
 SA-4 'Ganef' SAM Vehicle CWWP-20



(a) Mid-1980s: May replace SA-7 'Grail' SAM with:
 SA-14 'Gremlin' SAM Team CWWP-100
 In late 1980s: May replace with:
 SA-16 'Gimlet' SAM Team CWWP-101

(b) From mid-1980s: Replace BTR-50 APCs with:
 MTLB Armoured Carrier CWWP-90
 Or in training divisions, replace with:
 GAZ-66 Medium Truck CWWP-87

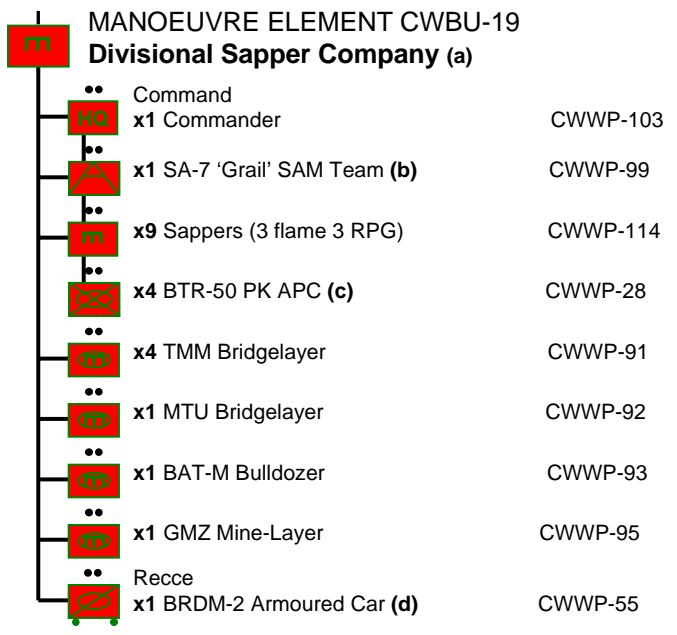
(c) Training divisions probably did not have such a generous supply of MTU Bridgelayers, SAMs and IMR Combat Engineer Tractors.



(a) Mid-1980s: May replace SA-7 'Grail' SAM with:
SA-14 'Gremlin' SAM Team CWWP-100
In late 1980s: May replace with:
SA-16 'Gimlet' SAM Team CWWP-101

(b) Replace with wheeled APCs in Wheeled Motor Rifle Regiments:
BTR-152 Armoured Personnel Carrier CWWP-27
BTR-60 P Armoured Personnel Carrier CWWP-28
BTR-60 PA Armoured Personnel Carrier CWWP-29
BTR-60 PB Armoured Personnel Carrier CWWP-30
From mid-1980s: Replace all APCs with:
MTLB Armoured Carrier CWWP-90
Or in training divisions, replace with:
GAZ-66 Medium Truck CWWP-87

(c) Training divisions probably did not have such a generous supply of MTU Bridgelayers or SAMs

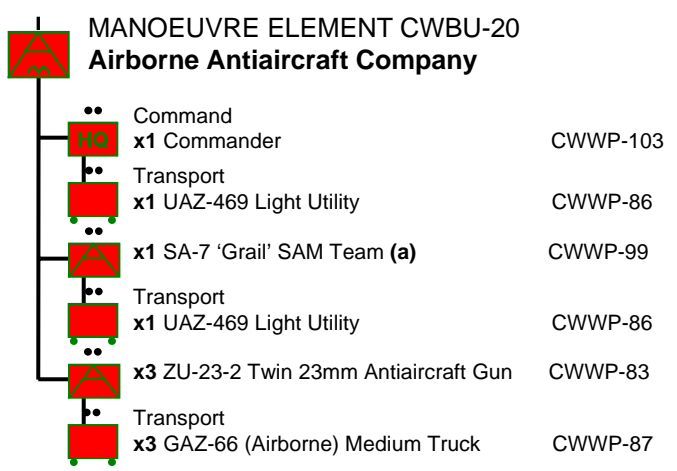


(a) The Battalion Recce Platoon and Bridging Platoon have been incorporated in the ME above.

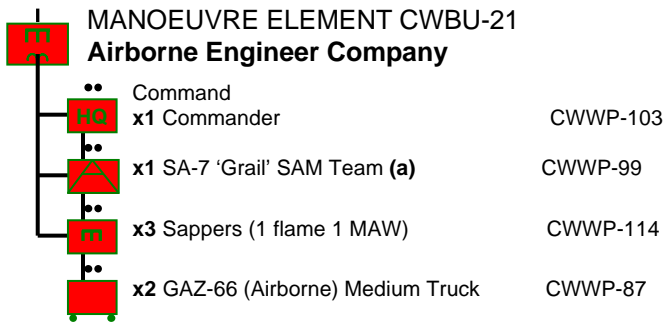
(b) Mid-1980s: May replace SA-7 'Grail' SAM with:
SA-14 'Gremlin' SAM Team CWWP-100
In late 1980s: May replace with:
SA-16 'Gimlet' SAM Team CWWP-101

(c) Replace BTR-50 APCs with:
MTLB Armoured Carrier CWWP-90
Or in training divisions, replace with:
GAZ-66 Medium Truck CWWP-87

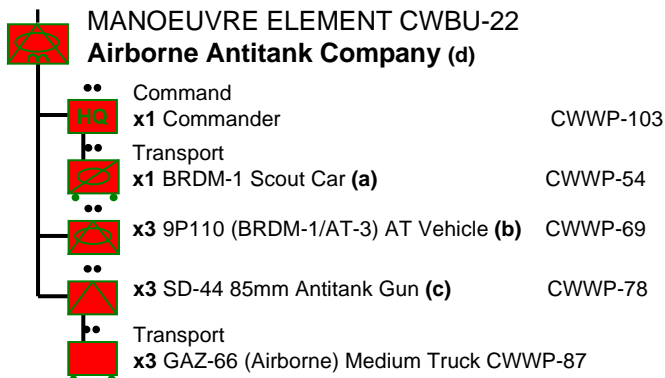
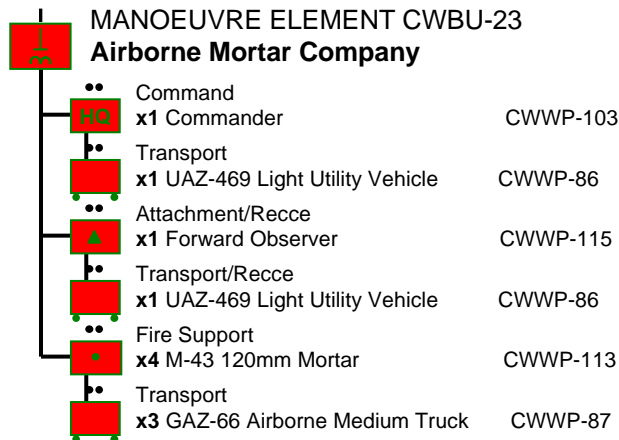
(d) The armoured cars may alternatively be obsolete types:
BTR-40 Scout Car CWWP-26
BRDM-1 Scout Car CWWP-54



(a) From mid-1980s, may replace SA-7 'Grail' SAM Team with:
SA-14 'Gremlin' SAM Team CWWP-100
Or from late-1980s with:
SA-16 'Gimlet' SAM Team CWWP-101



- (a) Mid-1980s, may replace SA-7 'Grail' SAM Team with:
SA-14 'Gremlin' SAM Team CWWP-100
Or in late 1980s with:
SA-16 'Gimlet' SAM Team CWWP-101



- (a) May replace commander's transport with:
BRDM-2 U Command Scout Car CWWP-60
- (b) May replace 9P110 ATGM Vehicle with:
9P122 (BRDM-2/AT-3 'Sagger') ATGM Vehicle CWWP-70
Or in late 1980s with:
9P148 (BRDM-3/AT-5 'Spandrel') ATGM Vehicle CWWP-71

(c) The SD-44 85mm Antitank Gun was equipped with an auxiliary engine for manoeuvring the gun when its tractor was not available (particularly likely in a heli-borne operation, for example). In game terms, the SD-44 may not be manhandled in the usual sense. (notice that the regular D-44 85mm Antitank Gun has a movement value of 0/0). Before moving, an SD-44 must use an action to 'limber' and may then move at its movement rate (2/4), classed as a Wheeled Vehicle for bog-down/breaching purposes. It must then use an action to 'unlimber' before firing.

(d) This ME may be split up and allocated as individual unit attachments to other MEs in the BG.

Bulgarian Air Support

The Bulgarian Air Force had the following ground-attack aircraft:

x24 MiG-17 'Fresco'	CWWP-126
x18 MiG-23 'Flogger H'	CWWP-128

In 1988 the MiG-17 ground-attack fleet was replaced with:

x20 Su-25 'Frogfoot'	CWWP-125
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The Bulgarian Air Force had these reconnaissance assets, which had a secondary ground-attack role:

x8 MiG-17 'Fresco'	CWWP-126
x6 MiG-21 'Fishbed'	CWWP-127

In 1988 the reconnaissance MiG-17s were replaced with:

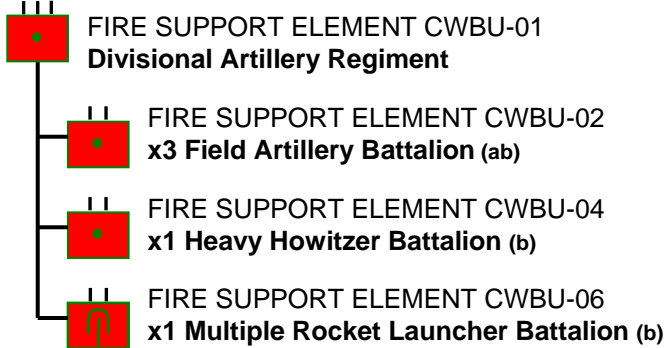
x9 Su-22 'Fitter D'	CWWP-124
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The Bulgarian Air Force had the following fighter aircraft:

x24 MiG-21 'Fishbed'	CWWP-127
x8 MiG-23 'Flogger H'	CWWP-128

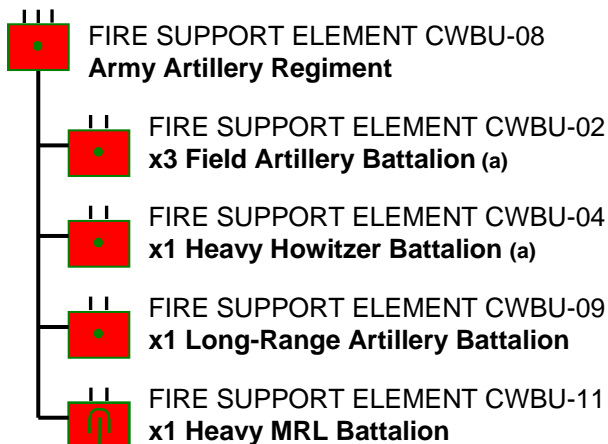
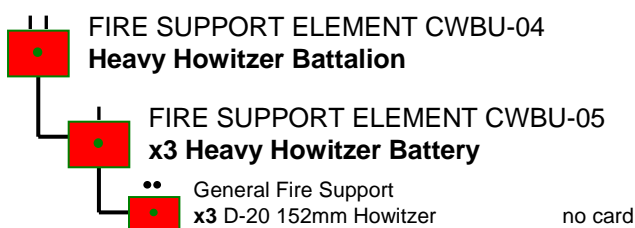
There were also some training aircraft with a secondary ground-attack role:

x6 L-39 'Albatross'	CWWP-137
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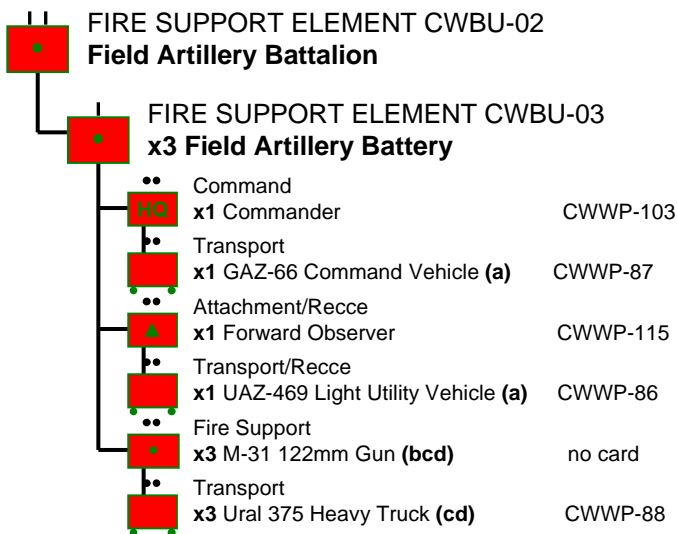


(a) By the early 1980s, half of Bulgaria's artillery pieces were still ancient M-31 122mm Guns. There were sufficient (marginally less-ancient) M-38 122mm Howitzers to equip one Field Artillery Battalion in each of the five 'regular' Motor Rifle Divisions. The Tank Brigades had already upgraded to modern D-30 122mm Howitzers and the Motor Rifle Divisions would be steadily upgraded throughout the 1980s.

(b) The three training divisions seem to have had only x3 Field Artillery Battalions (probably M-31 throughout the 1980s) and no Heavy artillery or MRLs.



(a) Army-level Field Artillery Battalions were equipped with generally M-31 122mm Guns throughout the 1980s. However, some may have been converted to Heavy Howitzer Battalions as per FSE CWBU-04 in the late 1980s.



(a) May replace softskin command/OP transport with:
1V18 Artillery Command/OP Vehicle CWWP-70
In Tank Brigades, replace with:
1V13 Artillery Command/OP Vehicle CWWP-69

(b) Some Field Artillery Battalions in regular Motor Rifle Divisions may replace their M-31 122mm Guns with:
M-38 122mm Howitzer no card
From mid-1980s in some regular Motor Rifle Divisions: Replace guns/howitzers with:
D-30 122mm Howitzer CWWP-76

(c) In Tank Brigades: Replace all artillery pieces with:
D-30 122mm Howitzer (d) CWWP-76
Also replace Ural 375 Heavy Trucks with:
MTLB Armoured Carrier (d) CWWP-90

(d) In Tank Brigades from mid-1980s: Replace the D-30 122mm Howitzers with:
2S1 'Gvozdika' Self-Propelled 122mm Howitzer CWWP-75

