#### COMPANY COMMANDER

#### AIR DEFENCE UNITS

#### TACTICAL BRIEFING ON AIR DEFENCE UNITS

These units fall into several categories. The first group are light weapons usually 12.7mm heavy machine guns, and 20mm cannon. These are the cheapest and most readily available and can be effective at very low levels. The next type of unit is the fast fire heavy calibre cannon, of around 30 - 60 mm calibre. These units rely on rate of fire to fill the air with shrapnel for the oncoming aircraft to fly into. These units are not normally linked to a radar system and need to fire a great many rounds to achieve this 'wall of steel' type defence. The other type of weapon is the missile launcher unit. This unit tracks targets and attacks them using missiles. Missiles tend to come in two categories, hand held (light Short Range) and Heavy, usually vehicle mounted and radar controlled.

The doctrine of of AAAD is the surest way to defend a target. This means All Arms Air Defence. The theory is that all available weapons are brought to bear against the attacker, from light machine guns, hand held missiles and upward to the heavy AA units. The theory is that any damage is good damage, and if ground fire causes losses, the aircraft will have to fly higher to escape, where they will come into the most effective operational area of the missile units. It would be foolhardy to have any place of strategic value that does not have some sort of air defence. Attack from the air can be devastating to an undefended location, so proper means should be taken to make the airspace above your ground units as hazardous as possible to your enemies.

ZPU-4 14.5 mm Quad Heavy Machingegun

Country	Russia		
Base Price	40	A P	
Base TTC	80		
Unit Weight (Lbs)	3700		
Road Speed (mph)	0		-
Combat Supply (Pts)	6		
Travel Range (Miles)	0		
Crew	4		17. A. C. L.
Communication Range (Miles)	0	Attack strength Infantry	7
Night		Attack Strength Soft	7
Radar		Attack Strength Lt Armour	4
AAA Ground Range (Metres)	2000	Attack Strength Anti Tank	2
AAA Range Altitude (feet)	1500	Attack Strength AAA	9
AAA Air Range	2500	Attack Strength Forts	2
Secondary Armament	0	Defence Strength	1
Secondary Armament Range (M)	0	Towed	
Main Armament	4 x 14.5 mm Heavy Machineguns		

One new ZPU-4 anti aircraft gun. The quad mounted 14.5mm heavy machine guns have a high rate of fire with very good accuracy at low altitudes. This is a close in defence weapon against helicopters and low flying attack craft. The ZPU-4 can be towed on or off-road by light truck or larger. Its small load allows it to be carried by most transport aircraft.

Rh202 Twin 20mm Anti-Aircraft Cannon

Country	Germany	11	
Base Price	99		
Base TTC	160		
Unit Weight (Lbs)	893		
Road Speed (mph)	0	the state of the s	A. Freed
Combat Supply (Pts)	12		No.
Travel Range (Miles)	0		
Crew	5		
Communication Range (Miles)	0	Attack strength Infantry	6
Night		Attack Strength Soft	6
Radar		Attack Strength Lt Armour	5
AAA Ground Range (Metres)	1500	Attack Strength Anti Tank	2
AAA Range Altitude (feet)	700	Attack Strength AAA	11
AAA Air Range	1500	Attack Strength Forts	2
Secondary Armament	0	Defence Strength	1
Secondary Armament Range (M)	0	Towed	✓
Main Armament	2 x 20 mm auto cannon		

One reconditioned Rh202 20mm Twin Anti-Aircraft Cannon. This unit has been proven as a light air defence weapon, with a good rate of fire. It has no radar, so can only be used with its optical sights limiting engagement times in poor visibility, and making much less effective during the night. However, it can engage targets out to 1000 metres, and to over 700 feet, and is also a useful weapon against light armour and soft targets. Unit can be towed by any vehicle.

S-60 57mm Anti Aircraft Gun

Country	Russia	A 10. 1	
Base Price	180		
Base TTC	600		
Unit Weight (Lbs)	11000		
Road Speed (mph)	0		
Combat Supply (Pts)	9		-4
Travel Range (Miles)	0		50
Crew	9		
Communication Range (Miles)	0	Attack strength Infantry	6
Night		Attack Strength Soft	6
Radar		Attack Strength Lt Armour	8
AAA Ground Range (Metres)	1500	Attack Strength Anti Tank	4
AAA Range Altitude (feet)	20000	Attack Strength AAA	16
AAA Air Range	1800	Attack Strength Forts	6
Secondary Armament	0	Defence Strength	1
Secondary Armament Range (M)	0	Towed	✓
Main Armament	1 x 57 mm Anti Aircraft Gun		

One Reconditioned S-60 57 mm Anti Aircraft Gun. It fires a large explosive shell that scatters shrapnel over a wide area, filling the sky with metal to damage or bring down aircraft. It has no advanced aiming devices, and relies upon a simple sight, so engagements can only be made in daylight with good visibility. This unit is also quite useful against ground targets, as it has been proved to be very destructive to personnel, soft targets and light armour. This unit can be towed by a Medium truck or larger vehicle.

ZU-23-2 Twin 23mm Anti Aircraft Gun

Country	Russia	and a site	
Base Price	110		0.11
Base TTC	160	and a second second second	
Unit Weight (Lbs)	1850		* *
Road Speed (mph)	0		
Combat Supply (Pts)	7		P
Travel Range (Miles)	0		
Crew	4	The second se	ale -
Communication Range (Miles)	0	Attack strength Infantry	3
Night		Attack Strength Soft	3
Radar		Attack Strength Lt Armour	2
AAA Ground Range (Metres)	2200	Attack Strength Anti Tank	1
AAA Range Altitude (feet)	16000	Attack Strength AAA	12
AAA Air Range	2500	Attack Strength Forts	2
Secondary Armament		Defence Strength	1
Secondary Armament Range (M)	0	Towed	✓
Main Armament	twin 23 mm Cannons		

One reconditioned ZU-23-2 low level anti aircraft artillery. This unit provides a high volume of fire against low level air attack. They burn ammunition very quickly, so good levels of supply are essential. There is no radar or electric traverse, so fast aircraft are difficult to target. The unit is towed by any vehicle.

ZRK Romb Mobile Launcher (SA-8 Gecko)

Country	Russia	(IAT)	
Base Price	420		and the second
Base TTC	490		. in a
Unit Weight (Lbs)	19000		
Road Speed (mph)	45		
Combat Supply (Pts)	5		
Travel Range (Miles)	500		
Crew	3		
Communication Range (Miles)	0	Attack strength Infantry	0
Night		Attack Strength Soft	0
Radar		Attack Strength Lt Armour	0
AAA Ground Range (Metres)	0	Attack Strength Anti Tank	0
AAA Range Altitude (feet)	0	Attack Strength AAA	0
AAA Air Range	0	Attack Strength Forts	0
Secondary Armament	0	Defence Strength	2
Secondary Armament Range (M)	0	Towed	
Main Armament	6 x SA-8 Gecko Su	rface to Air Missiles (Not Included)	

One reconditioned ZRK Romb mobile SA-8 Gecko launcher. This unit is fully independent, having twin radars and an optical tracking sight. The radar can acquire targets as far away as 18 miles. Missile engagement can then be carried out at a maximum range of 8 miles. The system can engage targets as low as treetop height, or as high as 16000 feet. With its on board radars and sight, this is a very formidable but very expensive weapon system. The system is highly mobile and amphibious, giving it great tactical flexibility.

Country France **Base Price** 333 **Base TTC** 400 Unit Weight (Lbs) 17200 Road Speed (mph) 40 **Combat Supply (Pts)** 12 **Travel Range (Miles)** 175 3 Crew **Communication Range (Miles)** 40 Attack strength Infantry 5 ✓ 7 **Attack Strength Soft** Night ✓ Radar **Attack Strength Lt Armour** 3 AAA Ground Range (Metres) 3000 **Attack Strength Anti Tank** 2 AAA Range Altitude (feet) **Attack Strength AAA** 6000 14 **AAA Air Range** 3000 **Attack Strength Forts** 3 **Secondary Armament** 1 x 7.62 mm MG **Defence Strength** 5 Secondary Armament Range (M) 600 Towed **Main Armament** 2 x 30 mm Cannon

AMX-DCA

One reconditioned AMX-DCA self propelled Anti Aircraft gun. This unit was originally built for the French Army to escort armoured forces into battle to protect them from low flying aircraft and later helicopters. It has an on board radar that can detect aircraft from 12 km away and a computer that can direct the twin 30mm Guns to their target. It can engage targets up to 6000 feet altitude and a distance of 3000 metres. It can also engage ground targets with a hail of fire that has proved effective. The system does have its faults with operator overload and radar limitations but has potential as an effective unit.

Country France **Base Price** 280 **Base TTC** 390 Unit Weight (Lbs) 15873 Road Speed (mph) 55 **Combat Supply (Pts)** 12 **Travel Range (Miles)** 621 3 Crew **Communication Range (Miles)** 50 **Attack strength Infantry** 6 Night **Attack Strength Soft** 5 Attack Strength Lt Armour 5 Radar AAA Ground Range (Metres) 1900 **Attack Strength Anti Tank** 2 AAA Range Altitude (feet) **Attack Strength AAA** 13 3500 **AAA Air Range** 2200 **Attack Strength Forts** 1 **Secondary Armament** 1 x 7.62 mm MG **Defence Strength** 3 Towed Secondary Armament Range (M) 600 **Main Armament** 2 x 20 mm Cannon

Panhard M3 VDA

One reconditioned Panhard M3 VDA Self Propelled Anti Aircraft Gun. The VDA mounts a win 20 mm anti aircraft mount on a VDA armoured vehicle. The VDA has served a number of countries over the years. It has a day only sighting system for daylight engagements only. It can engage aircraft and helicopters and has a useful ground attack capability. Obsolete in France and its clients but a useful air defence asset to any faction.

Country Taiwan **Base Price** 520 **Base TTC** 610 Unit Weight (Lbs) Road Speed (mph) 45 **Combat Supply (Pts)** 2 **Travel Range (Miles)** 210 2 Crew **Communication Range (Miles) Attack strength Infantry** ✓ Night **Attack Strength Soft** ✓ Attack Strength Lt Armour Radar AAA Ground Range (Metres) **Attack Strength Anti Tank** AAA Range Altitude (feet) **Attack Strength AAA AAA Air Range Attack Strength Forts Secondary Armament Defence Strength** 1 Towed Secondary Armament Range (M) **Main Armament** 4 x Skysword Missiles (Not Included)

Antelope

One reconditioned Antelope Air defence missile launcher System. This unit mounts 4 Skysword misiles. The unit is unarmoured but does have a radar to identify incoming aircraft. This lightweight missile launcher can add formidable short range air defence to any location.