

by Matt Bandy

Some gamers (myself included) are attracted to the idea of combining roleplaying with wargaming. For the most part, however, we are given only tantalizing bits of such a combination that leave us hungry for more. "The Battle of Volturnus" in STAR FRONTIERS® module SF2 is a good example. The module is great fun, but it ends too quickly. There's Alex Curylo's article, "Tanks a lot!" which appeared in DRAGON® issue #199 which deals with modifying civilian vehicles for combat. But would there not exist vehicles designed solely for combat purposes? This article presents just such vehicles, based on Alex's article noted above.

Cavalry

Four basic divisions exist in any wellbalanced military organization: infantry, cavalry, artillery, and command. This article deals with cavalry - that branch of an army organized and equipped for missions requiring great mobility. Statistics for particularly important cavalry vehicles are listed in Table 1. Airborne vehicles are also considered cavalry. Particularly important airborne vehicles are shown on Table 2.

The effects that different types of terrain have on cavalry vehicles is important in the calculation of realistic rates of movement. These effects are shown in Table 3. Detailed explanations of terrain types are given in the Alpha Dawn expanded game rules.

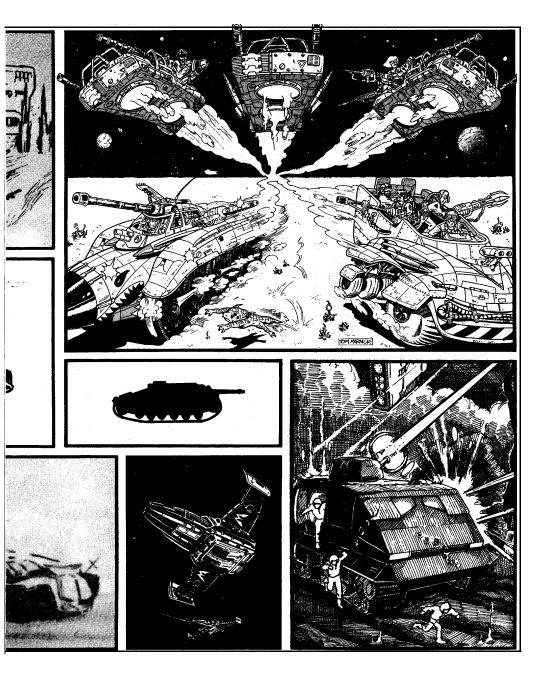
Bumping maneuvers

The vehicles dealt with in this article may take any action, such as bumping and slipping, that normal vehicles can. The battlewagon is an exception to this rule, as its actions may be limited by its size. Some

examples of bumping seem pretty unlikely, such as a hovercycle running an explorer off the road. To correct this situation and to integrate cavalry vehicles into the game, each vehicle has been assigned a "bump number." These numbers are listed in Table 4.

When a bumping situation occurs, the referee finds the difference between the two vehicles' Bump Numbers and multiplies that number by five. The result is added to the modified reaction speed score of the driver of the higher-valued vehicle, then subtracted from that of the driver of the lower-valued vehicle. A percentile-die roll is made for each driver to resolve the success or failure of the bump. Rolls of 01-05 always indicate success, just as rolls of 96-00 always indicate failure.

For example, a hovercycle is trying to run a ground car off the road. A quick look at Table 4 shows the difference be-



tween the two vehicles' Bump Numbers to be four. The hovercycle driver's score of 63 minus 20 (4 x 5 = 20) is 43, and the ground car driver's score of 81 plus 20 (for being the driver of the higher-valued vehicle) and minus 30 (for being the vehicle bumped) is 71. The hovercycle driver makes a 1d100 roll of 26, meaning he maintained control of his vehicle. The ground car driver, however, is not so fortunate: a roll of 95 indicates loss of control. The referee now consults the Control Table in the Alpha Dawn expanded rules (page 31) and continues play.

When a driver loses control of his vehicle, standard procedures governing this situation apply. The exceptions to this rule are the tank (ground) and the battlewagon. Due to their low centers of gravity and width, these two vehicles do not roll over. Treat a result of either "roll" or "roll and burn" as a spin.

Armaments, defenses, and sensors

Defenses and sensors, instrumental in locating and dealing with the enemy, are shown according to vehicular type on Table 5. Power screens may be of any type covered in the Alpha Dawn rules, the most common being albedo, inertia, and holographic screens. Albedo and inertia screens are detailed in "Tanks a lot!" Holographic screens are described in the following paragraph.

For use in sneak attacks, vehicles are commonly fitted with holo screens equipped with camouflage feedback loops. In certain terrains, however, this tactic is not effective. In passage over sand dunes, vehicles tend to raise a cloud of dust that the holo screen cannot hide, creating suspicion among observers. In these instances, it is best to disguise the vehicle as something More regionally appropriate, such as a thundering herd of camels. Holo screens cannot disguise or hide a vehicle from radar or infrared sensors. Holo screens use three SEU per. Minute.

Armaments are shown according to which turret they occupy in each type of ground vehicle on Table 6. The same is done for airborne vehicles on Table 7.

The following section regarding bombs is the only part of this article that deviates from the rules set forth in "Tanks a lot!" That section of Mr. Curylo's article oversimplified the topic.

Bombs do damage of varying severity according to the distance an object is from them when they explode. This is illustrated on Table 8. The chance of a bomb hitting its target is equal to one-half of the bomber's dexterity score, modified. In the event of a miss, use the Grenade Bounce Diagrams on page 24 of the Alpha Dawn expanded rules book. The asterisk represents the target and the arrow represents the direction the bomber is travelling. The distance by which the bomb misses its target is dependent upon the altitude of the bomber, as shown on Table 9.

The bomb explodes one turn after being dropped, giving the bomber that amount of time to vacate the blast radius. Failure to vacate the blast area results in damage to the bomber.

Due to the increased sophistication involved in the engineering, Manufacture, and application of futuristic vehicles, a great degree of skill will be required to operate these machines. Skill requirements for operating the vehicles dealt with in this article are shown on Table 10.

Targeting systems

Numerous targeting systems are in use throughout the Frontier Sector. The most common are the eye-weapon coordination (EWC), manual, and cyberlink systems. The cyberlink system is explained in Yanks a lot!" The remaining two are described in the paragraphs that follow.

"Eye-weapon coordination" means that the gunner's eyes and weapons are linked in such a way that they move in tandem. This is accomplished through the use of a special helmet fitted with a low-power laser. The laser follows the movements of the wearer's eyes and, through a complex circuitry link, brings the weapons to bear along the wearer's line of sight. When the weapons are aimed at the target, the gunner has only to push a button, flip a switch, or pull a trigger to fire any combi-nation of weapons. The helmet can be switched from infrared to normal vision and can be turned on or off. The gunner need not expose himself to enemy fire, for each helmet is also linked to a set of infrared and video cameras. The images these cameras receive are projected onto the inside of the helmet visor.

On all the vehicles detailed in this article, the weapons are controlled by EWC. The vehicles have one gunner operating each turret who may fire any combination of the weapons mounted on the turret in any one direction on a given turn. Of course,

Table 1 Land Vehicles

Vehicle Hover vehicles	Top speed	Turn speed	AC/DC	Crew	Parabattery	Mileage
Hovertank	200	70	60/40	3	4	4 SEU/km
APC	230	80	70/60	2 (20)	3	2 SEU/km
Battlewagon Ground vehicles	150	50	40/30	5	5*	8 SEU/km
Tank	130	100	70/60	3	4	4 SEU/km
APC	130	100	60/50	2 (20)	3	2 SEU/km

* A parabattery type 5 costs 8,700 credits, weighs 400 kg, and produces 8,000 SEU.

Key to Table 1

AC/DC: Acceleration/Deceleration

Crew: Minimum number of crew members required for the vehicle to operate at maximum efficiency. Value in parentheses shows passenger capacity.

Speeds: Given in meters per turn.

Turn speeds: Because of their low centers of gravity, most vehicles shown here have high turn speeds.

Mileage: The mileage properties of the vehicles are given because all the systems of said vehicles (i.e. weapons, defenses, sensors, and targeting systems) as well as the engine draw power from the vehicle's parabattery. A tally of SEU used should be kept by the players or referee.

Hovertank: A large, armored vehicle that floats 50 cm above the ground on a cushion of air. It resembles the tanks of today *sans* treads.

APC: Armored Personnel Carrier. Both ground and hover APCs look like large, armored transports and can carry 18 passengers. These passengers can all vacate the APC in two turns via the 10 hatches in the ceiling of the passenger compartment. These hatches may be opened to serve as firing ports.

Battlewagon: A huge, armored vehicle wide enough to take up two lanes of a highway, and designed to carry out extremely hazardous missions individually.

Tank: A large, armored vehicle much like modern-day tanks in appearance and locomotion.

Table 2 Airborne Vehicles							
Vehicle	Top speed	Cruise speed	AC/DC	Turns	Crew	Parabattery	Mileage
Attack helicopter	600	100	120/120	8	2	5	8 SEU/km
VTOL fighter-bomber	1500	650	120/120	6	2	5	8 SEU/km

Key to Table 2

Turns: The number of 45° turns the vehicle can make in one game turn.

Attack helicopter: An armed and armored jetcopter designed to combat enemy ground forces.

VTOL fighter-bomber: An armored aircar with exterior weapon mounts that is designed for high-speed bombing runs. However, it is versatile enough to hold its own in a dogfight.

Table 3 Effects of Terrain							
Vehicle	Clear	Broken	Rugged	Bog	Water	Highway	Hazard
Hover vehicles				0			
Hovertank	1.0	0.8	-	1.0	0.9	1.2	0.8
APC	1.0	0.7	-	0.9	0.9	1.3	0.8
Battlewagon	1.0	0.8	-	1.0	0.9	1.2	0.8
Ground vehicles							
Tank	1.0	0.9	0.8	0.7	-	1.1	-
APC	0.9	0.7	0.3	0.6	-	1.2	-
Airborne							
Attack helicopter*	1.0	0.9	0.6	1.0	1.0	1.0	0.6
VTOL fighter-bomber*	1.0	0.9	0.5	1.0	1.0	1.0	0.4

* Modifiers apply only if the vehicle is within 100 meters of the surface. Above that altitude, movement is at 1.0.

Table 4 Vehicle Bump Numbers

Vehicle	Bump number
Hovercycle	- 1
Ground cycle	2
Hovercar	4
Ground car	5
Hover transport	6
Ground transport	7
APC (hover)	9
APC (ground)	10
Hovertank	12
Explorer	13
Tank	14
Battlewagon	16

weapons firing once every two or four turns must respect their limitations. EWC gives the user a +30 modifier to hit. The gunner receives no additional bonuses due to weapons skills.

"Manual" operation means the gunner operates the weapon by hand. This is by far the most common targeting system in civilian use. The gunner using this system must expose himself to enemy fire but will have hard cover if the weapon is mounted on a vehicle. Skill bonuses apply when using this system.

UPF and Sathar use

The UPF and Sathar war machines have little use for cavalry vehicles, as they are expensive and easily destroyed by planetary defenses in any attempted landing. Nevertheless, each faction does maintain a small complement of cavalry vehicles aboard assault transports, in case the attackers happen to cripple the enemy's planetary defenses.

Planetary governments, however, are a different matter entirely. Being fast and durable, cavalry is an important factor in any planetary engagement and constitutes a large part of all planetary governmental armies in the Frontier. For what it's worth, large Sathar biogenetic constructs are also considered cavalry.

On a final note, EWC systems, all weapons, and all defenses presented in this article are banned from civilian use (except by UPF Grant #739) by the Arms Proliferation Act.

Table 8 Bombs		
Distance	Damage	
from bomb	Light	Heavy
0-20 m	25d10	50d10
21-50 m	20d10	40d10
51-100 m	15d10	30d10
101-200 m	10d10	20d10
201-300 m	5d10	10d10
301-400 m		5d10
401+ m	-	—

Table 6 Defenses, Sensors, and Turrets

Vehicle	Sensors	Defenses	Turrets
Hover			
Hovertank	IR,V,SL	IRJ,S,A20	2 (L)
APC	IR,V,SL	IRJ,S,A15	1(M)
Battlewagon	IR,V,SL	IRJ,S,A25	3(L)
Ground			
APC	IR,V,SL	IRJ,S,A20	1(M)
Tank	IR,V,SL	IRJ,S,A25	2(L)
Airborne			
Attack helicopter	IR,V,SL,R	IRJ,S,ES,A20	1(M), 4 (Pods)
VTOL fighter-bomber	IR,V,SL,R	IRJ,S,ES,A20	1(M), 4 (Pods)
Key to Table 5	X7 X7 I		1. 1.
IR: Infrared cameras	V: Video cameras	SL: Search	
R: Radar	IRJ: Infrared jammer	A: Armor ((# of coats)
S: Power screen(s)	ES: Ejection seat		

Vehicle	One		Three
Hover	one	100	Timee
Hovertank	VMG,VHL	GMx6	-
APC	VMG	-	-
Battlewagon	VMG,VHL	C,FT	GMx6
Ground			
Tank	VMG,VHL,FT	GMx8	-
APC	VMG,FT	-	-
Key to Table 6			

Table 7

Armaments for Airborne Vehicles

			— Pod n	umber —		
Vehicle	Turret	One	Two	Three	Four	Pylons
Attack helicopter	VHL	GMx4	VMG	GMx4	VMG	Bx2
VTOL fighter-						
bomber	VHL	GMx2	VMG	GMx2	VMG	Bx6
Key to Table 7 VMG: Vehicle machi C: Cannon		L: Vehicle l Flamethro			uided miss b (Heavy)	ile (Type 2)

Table 9 Distance of Mi	ss		Table 10 Skill Requirements		
Altitude of bomber	Miss distance	Vehicle	Driver skill requirement		
Point blank	20m	APC	Technician 1		
Short	50m	Hovertank	Technician 2		
Medium	150m	Tank	Technician 2		
Long	250m	Battlewagon	Technician 4		
Extreme	350m	Attack helicopter VTOL ftr./bmbr.	Technician 4 Technician 5		

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