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## I. THE JOURNAL

In a dimly lit comer of a government archive, you can find a dust-covered volume chronicling the most horrifying years in human history. It is the journal of the Director of the top secret Govemment Underground Biolab, and it reveals the institute's heroic struggle against the invasion of 1999. The journal has been retained, but one hopes that the world never again will need its lessons.

## March 29, 1999

Washington is a zoo. St. Andrew's received 187 new cases of the strange "bug" yesterday. The city is panicking. Unfortunately, ours is not an isolated case. Twenty-two other cities have had similar outbreaks of disease. So far, HEW is investigating the routine methods of contamination: poisoned food, bad batches of medicine, etc. We have been alerted, but no quarantines have been set up yet. The symptoms are extreme: the incoherent patient usually experiences debilitating nausea, chills, and high fever. Tomorrow, we'll receive blood and tissue samples for analysis. l'll assign Pintero to the work.

## May 7, 1999

We now have a national epidemic. Pintero found the cause of the disease a bacterium in three different forms. At first, the bacterium exists in a pupal stage. much like a caterpillar. The bacterium in this form causes great damage to the entire human neurological system. In the next stage, a cocoon, the bacterium becomes dormant, causing very little or no damage. But later, about two months after the adult bacterium breaks out of the cocoon, the patient dies. Pintero's experiments on rats convinced me that we don't have much time; the disease runs its course in about a year. We've got to produce a vaccine that prevents maturation. Once we've done that, we'll have to find a cure. I'm creating a special medical task force. In the meantime, we'll work with HEW to find out how this thing spreads. They suspect foul play.

## May 27, 1999

It's worse than any of us thought. They used fake passports to get here. Anderson
located one of them in Philadelphia, and I flew out for the interrogation in her guarded hospital room. Even truth serum didn't make her talk or dull the hatred in her eyes. As she succumbed to the disease, she spoke deliriously of her home and her cause. We know only that she hates anything associated with the U.S. Her blood samples indicate the bacterium has matured. She has only a month to live, but I can't feel sorry for this suicidal lunatic.

## June 8, 1999

This one talked. It's grim. The plan originated with a fanatic sect. Some of their scientists genetically engineered the bacteria. They injected one hundred volunteers, then sent them to the U.S. to spread the disease. They have been very effective; $82 \%$ of our country is infected to some degree. But the sect itself developed a cure. Many of the sect's members have received the vaccine. When I asked this member about the vaccine, he just laughed and tumed his head to the wall. Our task force must succeed.

## June 13, 1999

The country is dissolving into anarchy. The President, most of the Congress, the military, and the police forces lie in hospitals - if they re lucky. Those that aren't lie in the streets. Barely able to move, they can't find sufficient food and water. I remain isolated here with other GUB members. I pray for my family each minute, each second ... But there is hope, since we know a vaccine can be produced. The sect that infiltrated has one. Surely, we can produce a vaccine, too. The task force has a few leads; I'm sure we are closer to our goal.

## July 7, 1999

The Secretary called me today. "Herrell it's getting beyond our control. We're calling the National Guard to stem some of the looting.
"What can I do, Sir?"
"I think you'd better get that special task force of yours into the field to see the bacterium at work, to get a sample of the vaccine and analyze it."
"They're close, sir. Close to a real breakthrough."
'They d damn well better be. Have them report to me tomorrow. l'll arrange new locations. Everything top secret, of course." I think about the members of the task force. They are eager to go into the field. But I know... out there, it could mean their deaths.

## July 8, 1999

We stood listening to the Secretary, everyone tense, white-faced. Then, carrying small satchels of supplies, the task force boarded the helicopter. Each member had been given pellets of food and vitamin concentrates that would reduce his food consumption by half. The general population can get pellets only by looting the few shelters that contain them.

## July 20, 1999

Nuclear bombs have struck strategic cities across the U.S. With the defense system down, we could not protect ourselves or retaliate. The bastards. Radiation will cause horrible sickness. The worst of it is that not all of the bombs exploded. Some of the hardware was defective. So in various cities there are bombs likely to explode at any time. People will flee to cities to escape the existing radiation only to be annihilated by the delayed explosions.

Anderson and Rogers tell me that the cities are divided into small sections, each ruled by a gang with a strong leader. In some cases, where the leader is strong enough, the gang rules the entire city. Funny to think of Boston run by a motorcycle gang.

A gang leader usually gains control when he has a doctor, a drill officer, and a politician supporting him. Rogers, who made it back from the upper north side, said a leader called Mox is in control there.

Mox found his doctor while looting for supplies at a hospital. A doctor, depending on the degree of his skill, may be able to save a diseased soldier. Rogers doesn't know how, but he's seen men live who by rights should have died.

Drill officers at old military bases are usually willing to come with the gang leader. The drill officer is responsible for training and discipline. With training by a drill officer and experience in battle, a
gang member has his fighting ability increased.

Incredibly, even in a bio and nuclear war. politicians talk - and people listen. Mox found his politician by allowing needy people to join his band. Bureaucrats controlled Mox's area, but the politician reduced the amount of bribes Mox had to pay to them.

These gang leaders, together with their three cronies, can control cities. They can protect against or permit looting and other activities. But can they last?

## August 2, 1999

Now we must fight against a land invasion. Their forces, already inoculated, are everywhere. Heavily armed with conventional weapons, the invaders struck along the coasts and came through Mexico. Our own resistance has had mixed results. Few people are equipped - or even physically able - to fight the invaders. The gang leaders seem to have the best chances.

No phones, no mail. I hear little from the outside world and the agents have increasing difficulty returning. But a message did get through from one of the eight. They are very, very close to a breakthrough.

## August 21, 1999

The radiation from the nuclear bombs caused a strange mutation in the bacterium. The new strain affects the aggression-controlling area of the brain, causing extremely violent behavior. People carrying the new strain are called mutants.

Ironically, the invaders' vaccine is not effective against the mutated bacterium. The invaders now are experiencing the agonies others have felt. They die from the mutated disease; we die from the original disease. Each side needs the other side's vaccine. The doctors (now called healers) who have the new vaccine cure people, but at a huge price. All men must be cured at the same time or they become reinfected.

I feel disoriented and defeated.

## October 6, 1999

Travel is becoming extremely difficult for our agents. They must obtain food and gas, and if they are ill, the vaccine. Transportation is a problem. There is
snow and no one to plow the northern roads. Snow tires will cover twice as much ground as conventional tires, but they can be found in tire stores only. I loathe being forced to encourage looting.

## November 20, 1999

Our supplies are dwindlng. We've always kept a two-year cache of food and water, but we've gone through nearly half of that. Will we, too, become common looters and gang members when we ve eaten it all?

It must be time to bring the agents back to GUB . . . all eight of them. Dade Macallister, Washington, Pintero, Smidlapp, Trotier, Mills, and Sinh

I need a leader. I hear that there are individual gang leaders who control several cities at once. When a gang leader controls enough cities, l'll send an agent out to relay instructions. If the gang leader is loyal to our cause, he'll help the scientists to get back here. By the time he brings six or seven of them, I'll feel I can trust him and let him use the last Radio Direction Finder to locate the remaining one or two.

## December 25, 1999

I wait. Each tick of the clock signifies one moment gone, one fewer remaining. My men collapse, physically and mentally. I, myself, am not well, the images of pain, terror, and death in my dreams. It is Christmas Eve, 1999. The snow falls, mercifully covering the ugly scars. The old Christmas carols come to mind . . O Holy Night . .

## ॥. GETTINC STARTED

## A. Booting Instructions

Apple Family: Insert the disk, front side facing up. Turn on your computer. Make certain the CAPS LOCK key is depressed.
Commodore Family: Turn on the computer and the disk drive. Insert the game disk, front side facing up. Type LOAD " $\star$ ", 8 and press RETURN/ENTER. When the program is loaded and the ready prompt appears, type RUN and press RETURN/ENTER. Atari 800: Turn on the disk drive. Insert the disk, with the front side facing up. Remove all cartridges from your computer. (Note: An 800XL owner must hold down the OP-

TION key when turning on the computer to boot a disk.) Turn on your computer.

## B. Resuming a Saved Game

When asked whether you wish to resume a saved game, type $Y$ and follow the prompts on your screen.

## C. Starting a New Game

When asked whether you wish to resume a saved game, type N. When asked to enter the name of your gang, type a name of no more than 20 characters, and press RETURN/ENTER.

## III. COMMANDS

A)bandon Vehicle. You may abandon any of your vehicles. When you respond to the computer prompt with the ID number of a vehicle, that vehicle is dropped, and the remaining vehicles are renumbered.
C)ity, Scouting. You may send out scouting parties to search out the inhabitants of the city. Respond to the computer prompt with the number of each rank that is to be sent. Some of the scouting parties will not return.
D)rop Supplies. You may drop any amount (up to the amount carried) of Food, Tires, Fuel, Guns, and Medical Supplies.
Elmpire Status. The computer displays all of the cities controlled by the player as well as pertinent information regarding progress towards winning.
Flix Tires. The gang takes time out to replace damaged Tires with spares.
G)ang Status Report. The report consists of two parts: Gang Stats and Vehicle Stats. See Figure III for an explanation.
Note: A similar display will be used in deploying your troops prior to detailed road combat.
H)eal Sick with Antitoxin. If there is enough antitoxin, the crew is inoculated against disease. One unit of antitoxin cures 50 crew.
I)nitialize Save Game Disk. Respond to the computer's instruction to insert a blank disk and the disk will be formatted for your use.
K) Check Contents of Cache. The computer displays any supplies previously stored by a player in the currently occupied city.

## GANG STATS



PRESS < OR > TO CHANGE VEHICLE,
G FOR GANG STATS, OR $\times$ TO EXIT
(1) Vehicle ID No.
3) Vehicle Stats. The numbers listed with a slash show present/maximum values. Weapon type is Clossbow f MPH Note This vehicle of MPH. Note: This vehicle is improved from the Basic Trailer Truck.
Right Frotection Factor for Left metal
5) Crew on board. Shown are the maximum number of crew in and on aboard this vehicle, in order of rank, Armsmaster through Escort.

Lloot, Search for. The gang searches for usable items. Items exist in a number of locations, but they may or may not be found in the search. Looting has a chance of success in all but forest or desert terrain.
M)anpower Report. The computer displays the gang members by rank.
Pleople, Search for. The gang patrols an area, actively searching for other people. Generally, the search leads to footgang encounters.

## Q)uit Game.

R)ecall Saved Game. You may recall a game position from a disk and resume play from that position. Remember to save a current position to a disk (or it will be lost) before recalling a previous one.
Slave Game to Disk. You may save a game position to disk and resume play from that position at a later time. The save disk must first be formatted, using the I command. Only one game may be saved per disk. Play may be continued after saving the game. Note: You may find it wise to save your game frequently, especially early in the game.
T)ransfer Supplies to/from Cache. You may distribute supplies among the vehicles and the cache. This command may be used only when the gang is in a metropolitan area.
U)se Radio Direction Finder. You have a chance of acquiring an RDF to use in tracking down the scientists. Use of the RDF is explained in the rules (Section X. B.)
Vehicles, Search for. You may search the immediate vicinity for abandoned vehicles. This is the primary means of meeting a gang's vehicular transport needs.
W) Damage Report. During the movement or fire portions of tactical combat, you may view a brief report on the damage suffered by the active vehicle.
X) Examine Supplies. The computer displays a summary of the supplies carried by the gang at present.
Number keys (1-8). The gang moves 1 space in the indicated direction on the overland map.

1=North 3=East 5=South 7=West $2=$ North- $4=$ South $-6=$ South- $8=$ Northeast east west $\quad$ west

Note: Not all commands are available from all menus. As a general rule, all commands pertinent to a given situation are available. For example, during road combat aftermath the $\mathrm{G}, \mathrm{X}$ and D commands are available. Don't hesitate to press a command key at any menu. If it is available it will be activated. If unavailable no harm will be done.

## IV. OVERLAND MOVEMENT

Overland movement is controlled by the number keys. 1 represents north, 2 northeast, 3 east, and so forth to 8 which represents northwest. For easy reference, a directional rosette appears on the map in the middle of this rulebook.

Each movement on the overland map represents travel of approximately fifty to seventy-five miles.

## A. Terrain

-     - 1. Plains. Plains represent range land and other rural terrain not primarily used for agriculture. Roads are few and of poor quality; travel is slow. Ranches are common, but farms less so. Other establishments are few and far between. People are scarce.


2. Farmland. Farmland represents land used primarily for agriculture. Roads are in poor condition, slowing travel. Farms are very common; they are sometimes raided for food by road gangs. Other people are scarce.

3. Desert. Desert represents barren terrain with no roads to speak of. Little life exists in the desert. To run shy of fuel is to perish 4. Woods. Woods represent areas of virgin forest with few roads and no habitation worth mentioning. Woods are another place in which to be sure of one's fuel supply.

4. Mountains. Mountains are very rugged terrain with no roads. Travel is almost impossible.

5. Wilderness. Wilderness rep resents rugged, forested land untouched by the hand of man. Passage is impossible.
6. Water. You may be the savior of your race, but you can't drive on water.

7. Roads. Roads represent large interstates and multi-lane highways. Not all were left intact by the war. Many smaller cities and towns dot their lengths. Road gangs may find sufficient supplies for subsistence. Travel is rapid despite numerous wrecks and abandoned vehicles.

8. Cities. Cities are large metropolitan areas. Metroplexes are areas formerly populated by at least five million souls. Large metropoli are areas formerly of at least one million, and small metropoli had well in excess of a hundred thousand inhabitants. Small metropoli tend to be even smaller in the west. The cities are the stomping grounds of a wide variety of social groups, some benign, others quite unsavory. supplies are plentiful, but can be exhausted. The larger the metropolis, the more inexhaustible the sustenance. Travel is no problem; there are a multitude of highways and byways which allow easy bypass of the streets choked with wrecks and abandoned vehicles.

9. Oilfields. Oilfields are areas in which petroleum was king. Roadgangs battle daily for access to the vast supplies of fuel still available the
10. Swamp. Swamp represents tracts of soft, treacherous, wet, and slimy land. Swamps are not hospitable to wheeled vehicles.

11. Long Island. Long Island may be entered only via the New York City metroplex.

12. Cape Cod. Vehicles cannot drive across Cape Cod Bay, so access is via the farmlands due west of the Cape.

13. Devastated Areas. These sites of cities formerly destroyed by nukes are unpleasant at best. There is little be gained in these
desolate places. Mutants are a constant danger.

14. Coasts, Small Islands, Cays, and others. These areas consist mainly of water. See Water.
B. Winter

December, January, and February bring unpleasant road conditions to the northern portion of the map. Operations are slowed to a crawl.

## V. VEHICLES

A. Vehicle Attributes

The basic attributes of each type of vehicle are given in the Vehicle Table.

The attributes that may be modified during play appear in the vehicle status section of the Gang Status Report. Type the command letter " $G$ " to view the report.

If a vehicle attribute does not appear in the vehicle status report on the screen,it cannot be modified during play.

1. Mass. Capacity and weight of a vehicle. 2. Structure. The vehicle's resistance to physical destruction.
2. Maximum Speed. The maximum speed of the vehicle in MPH. Maximum speed can be reduced by the loss of tires during combat.
3. Maneuverability. The ability to turn.
4. Braking. The ability to slow down.
5. Acceleration. The ability to speed up.
6. Missile Factors. The maximum number of crew who may fire through each facing of a vehicle.
7. Missile Protection. The amount of cover the vehicle affords against enemy fire through each facing.
8. Volleys. If the vehicle carries a sufficient crew, this is the number of times a vehicle's crew may fire during each fire phase. You can have either 1 or 2 volleys.
9. Tires. The number of tires possessed by a vehicle in good working order. Vehicles with 0 tires have treads or extremely heavy tires.
10. Boarding Factors. Dependent on facing and location in or on the vehicle, this is the maximum number of crew who may board enemy vehicles or transfer within or among friendly vehicles.
11. Interior Crew Capacity. The maximum number of crew who may ride inside the vehicle.
12. Topside Crew Capacity. The maximum number of crew who may ride atop the vehicle.
13. Fuel Consumption. The amount of fuel the vehicle requires to move once. The vehicle may carry in its fuel tank fuel equal to twice its fuel consumption (that is, the amount required to move twice) without taking up space in its carrying capacity.

VEHICLE TABLE


## Abbreviations

## MS = Mass

ST $=$ Structure
$\mathbf{M X}=$ Max Speed in MPH $\quad \mathbf{B}=$ Front Facing
$\mathbf{M N}=$ Maneuverability
BR = Braking
$A C=$ Acceleration
Missile Factor is the number of crew which can fire in a given direction
Missile Protection Factor is the armor protecting the interior crew.
It may be improved. Top armor starts at zero.
TRS $=$ The number of tires the vehicle uses. ' $T$ ' indicates treads which may not be destroyed. Fuel $=$ The amount of fuel consumed by the vehicle during strategic movement.

Twice this value may be carried in its tanks.

* = May fire one volley only during any fire phase

All other vehicles may fire two volleys if crew permits.
Size $=$ The facing icon used to represent a vehicle in tactical combat is dependent on the size of the vehicle.

## B. Maintenance

1. Structural Damage. Vehicles may sustain structural damage during combat with enemy vehicles. This damage may be repaired at various body shops located while looting.
2. Flat Tires. Tires may be lost during combat. These can be repaired after combat. Repair requires that your gang carry a sufficient number of replacement tires.

## C. Improvements

Vehicles may be improved during play by the discovery of certain special locations while looting. Some enemy road gangs may drive improved vehicles.

## VI. SUPPLIES

## A. Carrying Capacity

Each vehicle can carry an amount of supplies equal to the number of Spaces in its carrying capacity. The total capacity of the gang's vehicles is displayed in the Gang Status Report. Each unit of supply of Food, Tires, Fuel, Guns, and Medical Supply takes up one Space of the total capacity. Ammo and Antitoxin take up no spaces. The Fuel needed for two moves is stored in a vehicle's tank; this amount is not displayed on the status report and does not take up Space.

## B. Consumption

Each night each member of your gang eats one unit of food. Each time your gang moves, its vehicles consume fuel equal to the fuel consumption figure given in the Gang Status Report. Healers require various amounts of medical supplies in exchange for their services. Tires are consumed in repairing battle damage. Every time a member of your gang fires a gun, one round of ammo is expended.

## C. Caches

You may stash up to 255 units each of Food, Tires, Firearms, Fuel, and Medical Supplies in each metropolitan area. Supplies may be transferred freely between your gang's supplies and your cache while in the area in which the supplies have been stored.

## VII. PEOPLE

## A. Gang Members

1. Quality. Almost all of the people you encounter will be rated armsmaster, bodyguard, commando, dragoon, or escort, in order of decreasing effectiveness. A member's quality reflects the likelihood of that member's survival in all events.
2. Recruiting. Gang members may be recruited by searching for people and sending envoys. The higher the quality of the prospective gang member, the less likely he is to join your gang.
3. Cronies. A crony can be of invaluable aid in your travels. Only one of each specialty can travel with you; therefore, when you encounter and accept a new one into your gang, your former specialist leaves. Each crony practices his trade with a different degree of skill.
a. DOCTOR. If your gang includes a doctor, its casualties in foot combat are reduced and fewer men are lost to disease and accident. The quality of your doctor determines his effectiveness. You must judge his skill from the results of his work.
b. DRILL SERGEANT. If your gang includes a drill sergeant, its losses to desertion and recklessness are decreased and the number of men promoted is increased. The quality of your drill sergeant determines his effectiveness.
c. POLITICIAN. If your gang includes a politician, he can serve as your envoy and liaison with bureaucrats. He is your mouthpiece and can talk himself out of a cannibal's mouth (sometimes) or even talk a lesser politician out of offering to join you.

## B. Encounters

1. Agents and Scientists. While searching for people, you may encounter agents. They are unlikely to reveal themselves under normal conditions. Similarly, you may find scientists, who will introduce themselves at the right moment.
2. Healers. The healers are the remnants of the medical community. Bound together by their common oath, they have gathered into informal research groups to aid the sick
(continued on page 11)

$\square=$ Small Metropolitan Area
$\square=$ Large Metropolitan Area

+ C $=$ Metropolis
$\square=$ Interstate Highway
$\square=$ Oilfield
$\square=$ Farmland
and injured and seek remedies for the disease. They ask only to be supplied with medical goods and to be left alone. They heal all who seek their services. The healers have developed an assortment of antitoxins to cure the mutant infections. They live primarily in cities where their needs for research materials can be met more easily.


## 3. Foot Gang Commands

a. SENDING ENVOYS. A dangerous mission, but the best way to gain recruits. Showing strength may be beneficial. If you have a good politician, you may not need to send troops. Note: If you send 0 envoys, you are returned to the previous menu.
b. FIRING A VOLLEY. This is the ultimate show of strength. It tends to cause bad feelings among the recipients.
c. WAITING. Waiting may be taken by some as a sign of weakness.
d. LEAVING. Leaving is understood by all as a sign of weakness.

## 4. Foot Gangs

a. MERCENARIES. Soldiers of fortune, mercenaries are groups of well-trained exmilitary types. It is dangerous to quarrel with them, but it is seldom necessary as they generally are willing to ally with a stronger gang. Never insult a mercenary band.
b. STREET GANGSTERS. A street gang includes a mixture of stout followers and camp followers, but usually has a strong. intelligent leader.
c. ARMED RABBLE. Pillagers and rapists, armed rabble are a scummy lot with little to recommend their company.
d. THE NEEDY. Mobs of starving and pitiful souls. Any one of them might give his life for a mouthful of food.
e. CANNIBALS. These throwbacks have solved the food problem. They are wily ones, fond of ambushing envoy parties. The scum of the earth.

## 5. Residents

a. LAWFUL NATIONAL GUARDSMEN. A few cities are still under martial law imposed by isolated national guard units containing well-armed and well-trained troopers.
b. RENEGADE NATIONAL GUARDSMEN. These mutinous bands of armed and dangerous soldiers prey on all who are unfortunate enough to enter their cities.
c. LOCAL GANSTERS. Some cities have come under the control of intelligently led large gangs.
d. BUREAUCRATS. Occasionally, local governments maintain control of their municipalities with the aid of local law enforcement agencies. Gangs who pass through must pay tolls in most of these places.
e. SURVIVALISTS. Knots of hard-core survivalists, trigger-happy and dangerous, have followings in some cities.
f. THE REBORN. These are pleasant folk with a single aim, to live in peace. They never provoke a fight, and anything they have is yours for the asking
g. SATANISTS. Skulking bushwhackers, these bands want to be left alone to practice their ways. They use passersby for target practice and seek victims for their rites.
h. THE MOB. The country's second government holds a few cities... They don't like intruders muscling in on their action.
i. INVADERS. These soldiers from other shores have some degree of control in all coastal and southwestern areas. Despising all road gangs for their undisciplined tactics, the invaders are very dangerous.

## 6. Mutants

These are the diseased, psychotic zombies who want to tear all healthy people to bits. Roaming quietly at night only, they are very dangerous.

## 7. Road Gangs

a. ARMED RABBLE. Some of these noaccounts can actually operate a motor vehicle. To be found in all areas, they are more annoying than dangerous.
b. RENEGADE NATIONAL GUARDSMEN These bands are more common in the hinterlands than their counterparts are in the cities. Their excellent armament makes them dangerous foes.
c. CANNIBALS. Ever see a slime drive a car? These vermin fit the bill. Poorly armed and led, they are easily dispatched.
d. TURF GANGS. There are a number of gangs which have claimed certain locales A gang will contest the claim of any riva road gang which infringes on its territory. Most are well armed, and many drive modified vehicles. Their training is above average.

## VIII. ROAD COMBAT

A. Modes of Combat Resolution There are three modes of road combat resolution: ABSTRACT TACTICAL, and QUICK When a rival road gang is encountered, the computer prompts FIGHT DETAILED ROAD COMBAT? If you respond $N$, the resolution is ABSTRACT and very fast and bloody. If you respond $Y$, the computer prompts you to insert the back of the game disk. Deployment (Section VIII. B.) occurs, and is followed by either TACTICAL combat resolution or QUICK combat resolution at the player's option.

## B. Deployment

## 1. Crewing Vehicles

a. AUTO-DEPLOYMENT. The compute places all of your men in vehicles. They are distributed among your vehicles as evenly as possible based on the quality of your troops. Guns are distributed to as many vehicles as possible. Folowing auto-deployment, you have an opportunity to adjust the troop and weapon allocations as you choose
b. MANUAL DEPLOYMENT. You must manually allocate your men one at a time to vehicles. You also must allocate weapon types for each vehicle for each volley. For this purpose, one half the crew constitutes a volley.

Note: When using manual deployment or when adjusting after auto-deployment weapon types may not be altered until all troops are allocated. When the crew of a vehicle is changed, that vehicle's weapon types will be reset to crossbows.

## 2. Deploying Vehicles on the Tactica

 Mapa. DEPLOYMENT AREA All vehicles must be deployed in spaces with an $X$ coordinate of 10 through 19. There is no such limitation on the $Y$ coordinate.
b. RESTRICTIONS. Vehicles may never be deployed on trees, oil derricks, rocks, fences, wrecks, water, or buildings. In farmland, vehicles never may be deployed in mud or tilled fields. In cities and on highways, vehicles may be deployed only on roads.

## C. Movement on the Tactical Map

1. Viewing the Tactical Map. During any friendly movement turn, you may view the map by activating the viewing mode cursor. To activate the cursor, press a number key
from 1-8. Subsequently, each time you press a number key, the cursor moves and the map scrolls to enable viewing the entire area. Exit viewing mode by pressing Q to continue moving vehicles.
2. Changing Speed. A vehicle may accelerate or brake, but never both in one move. All changes in speed must be completed before a vehicle moves. Changing speeds may be interspersed with turning maneuvers.
3. Maneuvering. A vehicle's maneuverability represents the number of 45 -degree turns the vehicle may execute in a single move. Maneuverability is reduced by tire damage and high speed. Maneuverability is reduced by 1 for every 30 MPH or fraction thereof by which the vehicle's speed exceeds 30 MPH . Maneuverability is reduced in proportion to the fraction of tires lost. An unmoving vehicle never can maneuver. A vehicle with a speed of 10 MPH can maneuver freely.
4. Moving. Vehicles can move only one space straight ahead in each move. Movement ends a vehicle's turn, therefore all changes of speed and turning maneuvers should be completed prior to moving.

## 5. Terrain Effects.

a. SPEED LOSS. When a vehicle enters any terrain, except roads, it may have a 10 MPH loss in speed. Roads never cause a loss of speed.
b. FISHTAILING. A vehicle entering mud chances losing traction and swerving to a different facing.
c. COLLISIONS. Vehicles which attempt to enter terrain such as rocks, oil derricks, trees, wrecks, or buildings are halted and suffer structural damage and possibly destruction. Fences and cacti also cause structural damage, but the vehicle destroys the obstacle and is not halted.
d. WATER. Driving a vehicle into water is a sure way to lose the vehicle and all aboard.

## D. Ramming

Whenever a vehicle attempts to enter a space occupied by another vehicle (friendly or enemy), a ram occurs. Both vehicles may receive structural damage, and either or both may be destroyed.

1. Structural Damage. The amount of structural damage incurred by each vehicle
in a ram depends on the speeds, masses and relative facings of the vehicles involved. The faster the speeds of the vehicles, the greater the damage. Head-on rams are most destructive, broadside rams are average, and front-to-rear rams are least destructive. In any ram, each vehicle is damaged in inverse proportion to the ratio of its mass to the mass of the other vehicle. All vehicles have reinforced front ends and therefore receive half damage if ramming. or if rammed head-on.
2. Speed Alterations. Either or both vehicles involved in a ram may suffer a change in speed.
3. Overruns. If one vehicle involved in a ram outmasses the other by a great deal the smaller vehicle may simply disintegrate and the larger experience little effect.

## E. Fire Combat

1. Volleys. In fire combat, most vehicles may fire two volleys. Each volley must be fired through a different facing. If all men fire in the first volley, a second volley is not allowed.
2. Facing. Each volley must be directed through either the left, right, front, or back facing of the vehicle. The number of men who may fire in a volley depends on this facing.
3. Line of Sight. Vehicles cannot see or fire through trees or buildings. To check the line of sight of a vehicle, press a facing key while holding down the control key.
4. Weapon Types. There are two types of projectile weapons: crossbows and guns. Crossbows have a maximum range of 5 spaces. Guns have a maximum range of 10 spaces and are more accurate than crossbows at equal ranges. Both types suffer attenuation of accuracy due to range. Men armed with guns resort to crossbows if all ammo has been expended.
5. Tires. Tires may be lost due to fire combat. A loss affects the maneuverability and maximum speed of the vehicle.
6. Missile Protection. Each vehicle affords various degrees of protection for its crew dependent on the facing through which the fire is received. The higher the protection factor, the better the protection. Protection 5 equals complete protection.

Note: Tires have protection 4.
F. Boarding Combat

1. Limitations on Boarding. Men may board only vehicles which are horizontally or vertically adjacent or directly in front of or behind. See figure below.
$\frac{\text { Legal Boarding/Transfer Locations }}{\mathrm{Bd} \mathrm{\quad Bd}}$
$\frac{\mathrm{Bd}}{\mathrm{Bd} \quad \mathrm{Bd}}$
$\frac{\mathrm{Bd}}{\mathrm{Bd}}$
$\frac{\mathrm{Bd}}{\mathrm{Bd}}$
$B d=$ Legal Boarding/Transfer Locations
Men may be killed attempting to board enemy vehicles. There never may be more boarders on a vehicle than its total crew capacity. This limitation does not include the vehicle's crew in calculating the maximum allowable boarders. At least one interior crewman must stay aboard each friendly vehicle.
2. Order of Combat. In boarding combat, boarders, topside crew, and interior crew attack in a set order. First, the vehicle's topside crew attack any boarders. Next, boarders attack topside crew. If no topside crew remain, the boarders attack the vehicle's interior crew instead. Finally, interior crewmen attack any remaining boarders A round of combat may end with both crew and boarders still aboard the vehicle Combat is continued in the next boarding combat segment.
3. Vehicle Captures. When all crew have been eliminated and boarders still remain, the vehicle may be captured. When a vehicle is captured, any remaining boarders become its crew and the vehicle may move freely in the next movement segment.
4. Crew Transfers. Any vehicle which has no enemy boarders aboard may transfer crew between the interior and topside locations of that vehicle. If no enemy boarders are on a vehicle which is horizontally or vertically adjacent to a second friendly vehicle, or if the second vehicle is directly in front of or behind the first, the first vehicle may transfer crew to the second. Men may be killed in attempting to transfer between friendly vehicles. In all crew transfers, crew limitations of the receiving vehicle may not be exceeded. At least one interior crewman must stay aboard each friendly vehicle.
G. Aftermath. Road gangs carry significant amounts of supplies. These supplies become available to the victor when two gangs clash. If a winning gang has lost so many vehicles that it cannot carry all of its supplies, excess supplies are lost at random. Such losses may be mitigated by picking through the spoils left by the losing gang.

Note: The $G, X$ and $D$ commands are active to aid in balancing supplies after road combat.

## IX. QUICK COMBAT

## A. Quick Combat

This is a representation of tactical combat; it can be resolved much more quickly. All aspects of fire combat and ramming are as explained in the tactical combat section. The major differences are a lack of boarding combat and a lack of the ability to capture enemy vehicles. During quick combat, all vehicles are considered to be driving at maximum speed.

1. Delay Length. The higher the delay, the longer the display will remain on the screen. Quick combat may be paused by pressing any key and then resumed by pressing any key.
2. Ram Ratio. This determines the size of enemy vehicles which your vehicles ram. A ram ratio of 1 means your vehicle rams vehicles of equal or lesser mass. A ram ratio of 2 means your vehicle rams vehicles of half your mass or less. A ram ratio of $1 / 2$ means your vehicle rams vehicles up to twice your mass, etc.
3. Aiming Priority. Prior to quick combat, you are prompted to enter a priority for each location (topside, interior, or tires) for your group's fire. Each number you assign must be from 1 to 8 . The total of the three numbers must be exactly 10 .

## X. MISCELLANEOUS

A. Controlling Cities

One method of avoiding residential encounters is to take control of one or more cities. If a city is controlled by a rival faction, your gang must best them in combat, sometimes repeatedly, to usurp power. The smaller cities are less desirable and therefore easier to control.
B. Radio Direction Finder

It is possible to gain possession of a Radio Direction Finder during play. The RDF may be used to locate the ultra-secret, elusive scientists. To activate the RDF, press the $U$ key. To select a scientist's homer to be locked into, press 1 or 2.
C. Command Limitations

At the beginning of a game, your gang may possess a maximum of 6 vehicles. After that, whenever you complete a tactical (not abstract or quick) combat with a rival road gang, this maximum is increased by 1 . The absolute maximum number of vehicles your gang may possess is 15 .

Note: Vehicles lost during tactical combat still apply toward this maximum until the conclusion of the combat.

## D. Surprises

You may encounter surprises during your tenure as ganglord. Some are pleasant, others unpleasant. They might be specialty shops, side trips, and/or cities of special interest.

## XI. PLAYERS' NOTES

The following notes were excerpted from the logs of notorious gang leaders.
A. "Ace" Nader, leader of the AAA Dec. 4, 1999. These up-and-coming road gangs are a blessing in disguise. They don't realize they are just dogmeat for any real gang. I call them "welcome wagons," cause they keep my gang supplied with food, guns, fuels . . . what have you. They even deliver!
Dec. 9, 1999. Forget what I said before. Ran into a real gang today. Called themselves the L.A. Skulls. Put up a real good fight. We barely had time to salvage their supplies when reinforcements arrived. They chased us all the way to Modestol
B. "Rocco" Scalesi, leader pro-tem of the AAA
Dec. 28, 1999. Ace bit the big one today We ran into a heavily armored gang, even bigger than us. Ace forgot to duck, and even Doc White couldn't save him.
C. Elihu Lopez, leader of Dos Exis The road from Spokane to Fargo was the back breaker of 'em all. Me'n 400 boys left

Spokane in 10 vehicles, 5 of them big rigs and nothin' smaller'n a limo. When we got to Fargo, there were 80 of us stuffed into 1 semi. What a ride!

The worst stretch was north of Denver when we ran out of gas. We searched for two days solid and nuthin'! Then, all of a sudden, we Eureka'ed a fuel storage tank and we were cruisin' again.

## D. J. J. Jennings, leader of the Stockton Rollers

Starting out was the hardest. I remember when there was just me and 6 or 8 good ol' boys in the Rollers. We started with I hot rod.

I was thankful for the advice given me by B.O., the former leader, after I had bested him to take command. "First," he said, "you'll need more wheels. As many as you can find. Then get a couple dozen good boys to watch your back. Don't let your gang get too big, though, until you have a bunch of food.
"Once you've got plenty of vehicle space and food, start hiring troops. Watch your food, but gather a couple hundred men at least.
"Be real careful of the invaders. Scout every town and if you find those SOBs, clear out and fast.
"The last important thing is to know where the healers hang out in the area you're in. If there are no healers, it's time to move."

## E. Tom "Tow-Away" Jones, leader of Repo Men

First of all, you gotta git yerself sompin' big, lak a bus or semi, even a bulldozer. One o' them kin carry more'n its weight in supply. Then git some dudes, some crack shots, not namby-pamby tenderfoots. Sure, ya ask 'em ta join and then send da worst of 'em on a wild goose chase scoutin' or sumpin'. Keep an eye on yer gang, lots of things kin go wrong if yer short of food or medicin'. Set up yer caches early. That way ya won't have to go muckin' around, searchin' for sumpin' ya need.

Pay 'ttention to whar yer at, too. If yer stompin' around near the Arctic Circle in fall, don't be surprised if it takes the whole winter ta git down to places whar ya won't
have ta shovel out the freeway. An' find out who's in charge when ya come into a new town. It's safer to go lookin' fer them than ta have 'em looking fer you. 'Sides, it's polite. Oh, yeah, and when ya git into a tangle onna road, ya otta take real good care of yer vehicles. Don't go screamin' down a road at a hunnerd miles an hour cause all they need ta do is stick out a foot an' boom! yer dead.

Set up yer cars in a checkerboard pattern ta give ya more whadayacallum flexibility. Remember the more roadfights ya really command, the better ya'll git. So when ya hit some o' the really nasty road gangs lak the Muthuh Truckers or the Hot Rod Lincolns, ya won't git creamed.

Keep in there. Keep on truckin' and ya might end up as king of the road.

## F. Gorgeous George Guttierez, <br> leader of the Marauders

What should I do? My men are starving and I am low on fuell Should I loot the town with the Nat'l guard around? Or should I take my chances with a feudal road gang!

My men have come a long way from a bunch of dragoons! Now l've got some well-trained bodyguards and a few elite armsmasters. Though I have some welltrained men, my attrition rate has been unusually high! There are only 28 men left out of my once loaded Mack crew.

I found 2 different foundries with enough workable steel between the two to build up some protection for my men on top. But now I need to find food. I decided to go south along the highway till I find a farm. I once heard there are a lot in California.

Since I keep my group compact and in one car, it's easier for me to avoid the bigger gangs with more cars. Since my group is well trained, I beat all the groups that are my size. My group, however, would not be so well trained if I had not passed by Cheyenne Mtn. in the Midwest and found that military man.

Yesterday, I was talking to Ace, leader of Triple A and I was telling him how dangerous it was driving only one vehicle. Thanks to some great welding jobs my crew did in Chicago, my truck has taken some head-on collisions and has come out OK.
G. Jammer Jacques, leader of the Paris 8 Gang
To My Trusted Lieutenants - to be read after my death.
July 10, 2000. We haven't been together very long yet, but I realize now how dangerous it is to travel these days. We've lost many friends and followers in numerous battles, but have somehow managed to gain new recruits. Now that I'm gone, allow me to emphasize certain important facts which will help you toward reaching your goal.

Fuel is your most precious commodity. Never carry so many other supplies that you have to scrimp on fuel.

Certain places are much more dangerous than others. Follow your survival instincts and avoid prolonged stays in the most dangerous areas.

Try to train, arm, and protect your people, especially the more able ones. They are harder to replace than vehicles.

Try to maintain a balance between the size and strength of your group and its mobility.

## Credits

Game Design \& Programming
Jeffrey A. Johnson
Game Development
Robert W. Calfee \& Jeffrey A. Johnson

## Playtesting

 Jim McPherson, George Guttierez \& Jim StuhlbargCustomized Disk Operating System (Apple version)
Roland Gustafsson
Art \& Graphic Design
Louis Hsu Saekow, Kathryn Lee \& Ben Willemsen
Typesetting
Abra Type \& Kathryn Lee
Printing
A\&a Printers and Lithographers

APPENDIX
(Tactical combat only)

## VEHICLE ICONS



LIST OF REGIONS

| REGION \# 1 - CANADA |  |  |
| :--- | :--- | :--- |
| cirr | Controuled <br> BY | Notes |
| Vancouver |  |  |
| Winnipeg |  |  |
| Windsor |  |  |
| Toronto |  |  |
| Hamilton |  |  |
| Ottawa |  |  |
| Montreal |  |  |
| Quebec |  |  |


| REGION \#2 - MEXICO |  |  |
| :--- | :--- | :--- |
| cirr | CONTROLLED <br> BY | NOTES |
| Tijuana |  |  |
| Mexicali |  |  |
| Hermosillo |  |  |
| Durango |  |  |
| Torreon |  |  |
| Monterrey |  |  |
| Chihuahua |  |  |
| Cuidad Juarez |  |  |


| REGION \#3 - CALIFORNIA |  |  |
| :--- | :--- | :--- |
| ciry | CONTROLLED <br> BY | NOTES |
| Sacramento |  |  |
| Santa Rosa |  |  |
| San Francisco/Oakland |  |  |
| San Jose/Mtn. View |  |  |
| Stockton |  |  |

REGION \#3 - CALIFORNIA (cont.)

| arr | Controlled <br> BY | NOTEs |
| :--- | :--- | :--- |
| Fresno |  |  |
| Bakersfield |  |  |
| Oxnard/Simi Valley/ <br> Ventura |  |  |
| Los Angeles |  |  |
| Anaheim/Santa Ana/ <br> Garden Grove |  |  |
| Riverside/San <br> Bernardino/Ontario |  |  |
| San Diego |  |  |
| Modesto |  |  |
| Salinas/Monterey/ <br> Seaside |  |  |
| Santa Barbara/ <br> Lompoc/Santa Maria |  |  |
| Napa/Vallejo/ <br> Fairfield |  |  |
| Visalia |  |  |

REGION \#4 - WEST CENTRAL U.S.

| arr | CONTROLLED <br> BY | notes |
| :--- | :--- | :--- |
| Las Vegas |  |  |
| Salt Lake City |  |  |
| Colorado Springs |  |  |
| Denver |  |  |
| Fargo |  |  |
| Omaha |  |  |
| Wichita |  |  |
| Tulsa |  |  |
| Oklahoma City |  |  |
| Minneapolis/St. Paul |  |  |
| Kansas City |  |  |
| Provo |  |  |
| Lincoln |  |  |

REGION \#5 - NORTHWEST U.S.

| air | CONTROLLED <br> BY | NOTES |
| :--- | :--- | :--- |
| Seattle |  |  |
| Tacoma |  |  |
| Portland |  |  |
| Spokane |  |  |
| Eugene/Springfield |  |  |
| Salem |  |  |
| Boise |  |  |
| Reno |  |  |

REGION \#6 - NORTH CENTRAL U.S.

| arr | CONTROLLED <br> BY | NOTES |
| :--- | :--- | :--- |
| Louisville |  |  |
| St. Louis |  |  |
| Milwaukee |  |  |
| Chicago |  |  |
| Gary/Hammond/ <br> E. Chicago |  |  |
| Indianapolis |  |  |
| Grand Rapids |  |  |
| Flint |  |  |
| Detroit |  |  |
| Toledo |  |  |
| Dayton |  |  |
| Cincinnati |  |  |
| Columbus |  |  |
| Yoron |  |  |

REGION \#7 - SOUTH

| cirr | CONTROLLED <br> BY | NOTES |
| :--- | :--- | :--- |
| New Orleans |  |  |
| Memphis |  |  |
| Nashville |  |  |
| Birmingham |  |  |
| Richmond |  |  |
| Norfolk/Va. Beach/ <br> Portsmouth |  |  |
| Raleigh/Durham |  |  |
| Greensboro/ <br> Winston-Salem/ <br> Hiah Pt. |  |  |
| Charlotte |  |  |
| Greenville |  |  |
| Atlanta |  |  |
| Jacksonville |  |  |
| Tampa/St. Petersburg |  |  |
| Orlando |  |  |
| W. Palm Beach/ <br> Boca Raton | Ft. Lauderdale/ <br> Hollywood |  |
| Miami |  |  |

REGION \#8 - NORTHEAST U.S.
REGION \#9 - BORDER STATES

| arr | Controuled <br> BY | NOTES |
| :--- | :--- | :--- |
| Pittsburgh |  |  |
| Buffalo |  |  |
| Rochester |  |  |
| Syracuse |  |  |
| Albany/Schenectady/ <br> Troy |  |  |
| Springfield/ <br> Chickopee/Holyoke |  |  |
| Boston |  |  |
| Providence/ <br> Warwick/Pawtuckett |  |  |
| Hartford |  |  |
| New York City |  |  |
| Newark |  |  |
| Scranton |  |  |
| Allentown |  |  |
| Philadelphia |  |  |
| Waltimington |  |  |
| Washington, D.C. |  |  |


| arr | Controuled <br> BY | NOTES |
| :--- | :--- | :--- |
| Phoenix |  |  |
| Tucson |  |  |
| El Paso |  |  |
| Albuquerque |  |  |
| Dallas/Ft. Worth |  |  |
| Austin |  |  |
| San Antonio |  |  |
| Corpus Christi |  |  |
| Houston |  |  |
| Beaumont |  |  |
| Amarillo |  |  |
| Brownsville |  |  |
| Lubbock |  |  |
| McAllen/Phar/ <br> Edinburgh |  |  |
| Waco |  |  |
| Temple/Killeen |  |  |

## MASTER COMMAND LIST

A = Abandon Vehicle
C = Scout the City
D $=$ Drop Supplies
$\mathbf{E}=$ Empire Status
F = Fix Tires
$\mathbf{G}=$ Gang Status Report
$\mathbf{H}=$ Heal Sick with Antitoxin
$\mathbf{I}=$ Initialize Save-Game Disk
$\mathbf{K}=$ Check Contents of Cache
$\mathbf{L}=$ Search for Loot
$\mathbf{M}=$ Manpower Report
$\mathbf{P}=$ Search for People
$\mathbf{Q}=$ Quit Game
$\mathbf{R}=$ Recall Saved Game
$\mathbf{S}=$ Save Game to Disk
$\mathbf{T}=$ Transfer Supplies to/from Cache
$\mathbf{U}=$ Use Radio Direction Finder (RDF)
$\mathbf{V}=$ Search for Vehicles
$\mathbf{W}=$ Damage Report (Tactical Combat Only)
$\mathbf{X}=$ Examine Supplies
Number keys (1-8) = Move in Indicated Direction

## VEHICLE TABLE

| VEHICLE |  | SIZE Ms | st | mx mn br Ac |  |  | $\begin{array}{\|l\|} \hline \text { MISSILE } \\ \text { FACTOR } \\ \hline \text { L/R F B } \\ \hline \end{array}$ |  |  |  |  |  |  | TRS |  | $\begin{aligned} & \text { BOARDING } \\ & \text { FACTOR } \end{aligned}$ |  | $\begin{aligned} & \text { CREW } \\ & \text { CAPACIT } \\ & \text { INT. ET. } \end{aligned}$ |  |  | fuel |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | /R | F | B | L/R | т $\quad$ |  |  |  |  |  |  |  |
| Motorcycle* | S | 1 | 3 | 100 | 4 | 22 |  |  |  |  | 22 |  | 0 |  | 2 | 0 | 2 |  | 1 | 01 |  | 2 |  | 1 | 5 |
| Sidecar* | S | 2 | 5 | 60 | 4 | 22 |  | 33 |  | $0 /$ | 1 | 2 | 2 | 3 |  | 1 | 01 |  | 3 |  | 1 | 20 |
| Compact Conv. | S | 3 | 8 | 80 | 3 | 21 |  | 32 |  | 1 |  | 1 | 1 | 4 |  | 1/2 | 02 |  | 6 |  | 2 | 45 |
| Compact H.T. | S | 3 | 8 | 70 | 3 | 21 |  | 44 |  | 2 |  | 2 | 2 | 4 |  | 0/1 | 20 |  | 4 |  | 2 | 45 |
| Midsize Conv. | M | 5 | 13 | 90 | 2 | 21 |  | 32 |  | 1 |  | 1 | 1 | 4 |  | 2/3 | 03 |  | 8 |  | 3 | 125 |
| Midsize H.T. | M | 5 | 13 | 80 | 2 | 21 |  | 45 |  | 2 |  | 2 | 2 | 4 |  | 1/2 | 20 |  |  |  | 3 | 125 |
| Sports Car Conv. | S | 4 | 10 | 120 | 3 | 22 |  | 32 |  | 1 |  | 1 | 1 | 4 |  | 2/3 | 02 |  | 6 |  | 4 | 80 |
| Sports Car H.T. | S | 4 | 10 | 120 | 3 | 22 |  | 44 |  | 2 |  | 2 | 2 | 4 |  | 0/1 | 20 |  | 4 |  | 4 | 80 |
| Station Wagon | M | 6 | 15 | 80 | 2 | 21 |  | 65 |  | 2 |  | 2 | 2 | 4 |  | 2/3 | 33 |  |  |  | 3 | 180 |
| Limousine | M | 8 | 20 | 100 | 2 | 21 |  | 65 |  | 2 |  | 2 | 2 | 4 |  | 1/2 | 33 |  | 8 |  | 4 | 320 |
| Van | M | 7 | 18 | 70 | 2 | 21 |  | 85 |  | 2 |  | 2 | 2 | 4 |  | 0/3 | 33 |  | 1 |  | 3 | 245 |
| Pickup Truck | M | 9 | 23 | 80 | 2 | 21 |  | 64 |  |  |  | 2 | 1 | 4 |  | 4/5 | 03 |  |  |  | 4 | 405 |
| Offroad Conv. | M | 6 | 15 | 70 | 2 | 21 |  | 22 |  | 1 | 1 | 1 | 1 | 4 |  | 1/2 | 02 |  | 4 |  | 4 | 180 |
| Offroad H.T. | M | 6 | 15 | 70 | 2 | 21 |  | 33 |  | 2 |  | 2 | 2 | 4 |  | 0/1 | 20 |  | 4 |  | 4 | 180 |
| Bus | L | 14 | 35 | 70 | 1 | 11 |  | 263 |  | 2 |  | 2 | 2 | 6 |  | 0/2 | 100 |  |  |  | 10 | 980 |
| Tractor* | M | 10 | 25 | 40 | 2 | 11 |  | 33 |  | 0 |  | 1 | 0 | T |  | 2 | 02 |  |  |  | 6 | 500 |
| Construction Veh.* | L | 18 | 45 | 30 | 2 | 11 |  | 44 |  | 0 |  | 1 | 0 | T |  | 3 | 03 |  |  |  | 10 | 1620 |
| Flatbed Truck | L | 16 | 40 | 80 | 1 | 11 |  | 14 |  | 0 |  | 2 | 0 | 14 |  | 6/7 | 04 |  | 51 |  | 8 | 1280 |
| Trailer Truck | L | 20 | 50 | 80 | 1 | 11 |  | 14 |  | 5 | 5 | 2 | 0 | 18 |  | - | 105 |  | 515 |  | 10 | 2000 |

## Abbreviations and terms:

$\mathbf{M S}=$ Mass: $\mathbf{S T}=$ Structure; $\mathbf{M X}=$ Max speed in $\mathbf{M P H} ; \mathbf{M N}=$ Maneuverability; $\mathbf{B R}=$ Braking: $\mathbf{A C}=$ Acceleration; $\mathbf{L} / \mathbf{R}=$ Left or right facing; $\mathbf{F}=$ Front facing; $\mathbf{B}=$ Back facing: $\mathbf{T}=$ Topside facing
Size: The facing icon used to represent a vehicle in tactical combat is dependent on the size of the vehicle.
Missile Factor is the number of crew which can fire in a given direction.
Missile Protection Factor is the armor protecting the interior crew. It may be improved. Top armor starts at zero.
TRS is the number of tires the vehicle uses. ' $T$ ' indicates treads which may not be destroyed.
Fuel is the amount of fuel consumed by the vehicle during strategic movement. Twice this value may be carried in its tanks.
*: May fire one volley only during any fire phase. All other vehicles may fire two volleys if crew permits.

If you have any questions or problems regarding the program or game, please send a selfaddressed, stamped envelope with your question to: Strategic Simulations, Inc., 1046 N. Rengstorff Avenue, Mountain View, CA 94043.

Or call our Hotline Number: (415) 964-1200 every weekday, 9 to 5 (P.S.T.).


## APPLE IIGS, ATARI ST and AMIGA Versions

Note: You should make a copy of your game disk before play. Put your original aside and play on the copy.

## BEGINNING THE GAME:

On the Atari ST \& Apple IIGS:
Put your game disk in Drive A and turn on your system. The game will self boot.

## On the Amiga:

Boot your system using Kickstart V. 1.2 or greater. When the screen asks for the Workbench disk, insert your game disk. The game will boot itself from this point.
Please make certain that your game disk remains in the drive at all times during play.

## RULEBOOK CHANGES

- Numbers used for movement conform to the numeric keyboard. Thus, pressing 8 will move you due north.
- There is no 'initialize' save game disk command. Pressing the 'I' key gives information about the game.
- The ' $V$ ' key gives you your damage report, not the ' $W$ ' key. This is a combat only option.
- Press ' 0 ' if you want to respond 0 K to a screen, and press ' C ' if you want to cancel.
- When you press ' $S$ ' to save a game, you will be asked to insert your save game disk. You may save your game either on your game disk or on a separately formatted disk.
- Most operations that can be done with the keyboard can also be done with the mouse.


