INSTRUCTION MANUAL
ROADWAR 2000

ROADWAR 2000

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:
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 'O' if you want to respond OK 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.

ROADWAR 2000™

I. OBJECTIVE

You lead a gang of trained men in specially prepared vehicles through the bio-war remains of devastated Europe. Scout cities to find the hidden nuclear devices and disarm them. Search out agents of the anti-terrorist underground and obtain clues on the whereabouts of the terrorist's headquarters. Once you've disarmed all of the bombs, find the headquarters and engage the terrorist leaders in a climactic battle to decide the future of all Europe!

II. GETTING STARTED

A. Booting Instructions
1. Commodore Family. Turn on the computer and disk drive. On the Commodore 128 hold down the Commodore Key while turning the computer on to put the computer into C64 mode. Insert the game disk into the disk drive with the side 1 facing up. Type LOAD"*",8,1 and press RETURN/ENTER. Put your joystick in port 2 to direct movement.

3. IBM and Compatibles. Start your computer with the DOS diskette. If you don't have the A prompt (A>) type A and press RETURN/ENTER. You should use your DOS Copy utility to make a copy of your game disk before play. Put your original game disk aside and play on your copy. If you want to save a game you must format a save game disk with your DOS Format utility. To begin ROADWAR 2000 type START and press RETURN/ENTER.

After the title screen select what kind of monitor you'll use. Then, select which keyboard setup you'll use for movement. The number two selection allows you to use the arrows on the keyboard to move up, down, left and right and the Home, End, PgUp, and PgDn keys to move diagonally.

The computer then displays a section of the ROADWAR 2000 map and asks if you wish to adjust the horizontal placement of the screen on your monitor. If you answer with a Y you can center the map on your screen.

Next, you can change the color set if the default colors don't look good on your screen. Throughout the game you can change the color set or adjust the map by pressing Y. This also allows you to adjust the length of time messages are displayed onscreen (1 = short delay. 9 = long delay)

B. Resuming a Saved Game
Type Y at the "resume saved game" prompt and follow the instructions on screen.

C. Starting a New Game
Type N at the "resume saved game" prompt. When asked to enter the name of your gang, type a name of no more than 20 characters and press RETURN/ENTER.

D. Starting a New Game With a New Gang
Type N at the "resume saved game" and the "use your Roadwar 2000 gang" prompts. Then build your gang and it's vehicles.

III COMMANDS

You control Roadwar 2000 by typing one letter commands at various prompts.
Not all commands are available at all prompts. Normally, all commands
pertinent to each situation are available. For example, in the aftermath of
road combat the D, G, and X commands are available. Don't hesitate to try
a command at any prompt. If the command isn't available nothing will happen.

A)bandon Vehicle. Type the ID number of the vehicle you want to abandon
at the prompt. That vehicle is abandon and your remaining vehicles are
renumbered. Remember to check the new vehicle ID numbers before abandoning
any other vehicles.

C)ity, Scouting. Type in how many members of each rank you send to scout
the inhabitants of the city and to search for nuclear devices. Some members
may not return. A successful scouting mission tells you who controls the
city. Any scouting mission will find a nuclear device and disarm it.

D)rop Supplies. Type in how many units of Food, Tires, Fuel, Guns and Medical
Supplies you want to drop. Dropped supplies may not be reclaimed.

E)mpire Status. The computer displays the cities you control, the number
of cities destroyed by the nuclear weapons, and various other information
you'll find as you play the game.

F)ix Tires. Your gang takes the time to use spares to replace destroyed
tires on your vehicles

G)ang Status Report. This report contains two different reports: the
Gang Status Report and a Vehicle Status Report for the gang's vehicles.
  Note: A similar display is used in deploying your gang before detailed
      road combat.

GANG STATS

		MAXIMUM VEHICLES: 15 [2]	
XX [1]		NUMBER OF VEHICLES: 10	

(1) Gang name.
(2) Number of vehicles.
(3) Health indicator.
(4) Fuel consumed in 1 move.
(5) Supply display. An *
    indicates the presence
    of a special item (snow
    tires and food
    supplements this time).
(6) Total capacity used.
(7) Cronies and the RDF are
    shown in this area.
(8) Total crew listed by
    rank, Armsmaster
    through Escort.

TOTAL CAPACITY:	8350	
PASSENGER CAPACITY:	456	
		HEALTHY [3]
FUEL CONSUMPTION:	31	[4]
FOOD:	1109	*
TIRES:	32	* [5]
FUEL:	4694	
AMMO:	59413	
GUNS:	405	
MEDICAL SUPPLIES:	27	
ANTITOXIN:	39	
TOTAL SUPPLIES:	6267	[6]

DOCTOR DRILL SERGEANT POLITICIAN RDF [7]

CREW (A/B/C/D/E): 110/23/12/1/3 = 149 [8]
PRESS ANY KEY TO CONTINUE, X TO EXIT

VEHICLE STATS

VEHICLE 1 [1]	TRAILER TRUCK [2]	
STRUCTURE:		60/60
MANEUVERABILITY:		3/3
BRAKING:		2
ACCELERATION	[3]	1
WEAPON TYPES:		F/F
TIRES:		18/18
SPEED:		6/8
FACING:		6
PROTECTION (L/R/F/B/T): 5/5/3/1/1		[4]
INTERIOR CREW CAPACITY:	51	
INTERIOR CREW QUALITY:	12/6/6/5/2	[5]
TOPSIDE CREW CAPACITY:	50	
TOPSIDE CREW QUALITY:	6/5/5/1	

(1) Vehicle ID No.
(2) Vehicle Type.
(3) Vehicle Stats. The numbers
    listed with a slash show
    present/maximum values.
    Weapon type is C)rossbow
    or F)irearm. Speed is 10's
    of MPH. Note: This vehicle
    is improved from the Basic
    Trailer Truck.
(4) Missile Protection Factor for Left,
    Right, Front, Back, Top. 5 is solid
    metal. 0 is open air.
(5) Crew on board. Shown are the
    maximum number of crew in and on
    the vehicle. Listed are the crew
    aboard this vehicle, in order of rank
    Armsmaster through Escort.

PRESS < OR > TO CHANGE VEHICLE,
G FOR GANG STATS, OR X TO EXIT

H)eal Sick with Antitoxin. Heals 50 gang members for each unit of Antitoxin
used. All of your gang members must be healed at the same time or the
inoculated will be reinfected.

I)nitialized Save Game Disk. Follow the on screen instructions to format a
blank disk to save the game on. This command does not format a disk on the
IBM version of Roadwar 2000. Follow the Getting Started instructions
on formatting a disk to save a game.

K) Check Contents of Cache. Displays the amount of supplies your gang has previously cached in this city.

L)oot, Search for. Searches the area you're in for usable items. Searching for loot has a chance for success everywhere but in the forest or desert.

M)anpower Report. Displays the number of gang members of each rank.

P)eople, Search for. Searches the area for people. Usually leads to footgang encounters.

Q)uit Game.

R)ecall Saved Game. Recalls a saved game and resumes play from the previous position. Remember to save your game to a separate disk before recalling a saved game or your current position will be lost.

S)ave a Game To Disk. Saves your current position on a previously formatted disk and resumes play. The save game disk must already be formatted using the I command. You can only save one game to disk.

T)ransfer supplies to/from Cache. Transfer supplies among the vehicles. You can only transfer supplies when the gang is in the city.

U)se Radio Direction Finder. If you pick up a RDF you can use it to help track down the terrorist headquarters.

V)ehicles, Search for. Searches the area for usable vehicles. This is an important means of finding new vehicles.

W) Damage Report. Displays damage status of vehicles during the Movement of Fire portions of detailed combat. In the C-64 version press V to display a Damage Report.

X) Examine Supplies. Displays the summary of supplies carried by the gang.

Number Keys (1-8). Moves the gang one space in the indicated direction on the overland map. The Commodore directional rosette is printed on the map of Europe. In Figure II the Commodore uses the first set of numbers to indicate direction. The IBM uses the second set of numbers on the keypad to indicate direction.

Commodore,	8	1	2
IBM,	7	8	9
	4	*	6
Figure II	1	2	3

IV. OVERLAND

Move overland by pressing a number key representing the direction you want to go. Each movement on the overland map represents travel of fifty to seventy-five miles.

A. Overland Terrain

1. Plains. Plains represent rangeland and other rural terrain not primarily used for agriculture. Roads are few and of poor quality and travel is slow. Establishments are few and far between. People are scarce.

2. Farmland. Farmland represents land primarily used for agriculture. Roads are poor, slowing travel. Farms are very common and road gangs sometimes raid for food. Other people are scarce.

3. Desert. Desert represents terrain which is barren and has no roads to speak of. Little life exists in the desert and to run shy of fuel is to perish.

4. Woods. Areas of virgin forest have few roads, no habitation worth mentioning. Be sure of fuel.

5. Mountains. Mountains are very rugged terrain with no roads. Travel is very difficult.

6. Wilderness. Rugged and forested land untouched by man. Passage is impossible.

7. Water. You may be the savior of Europe, but you can't drive on water.

8. Roads. Large autobahns and multi-laned highways. Not all were left in tact by the war. Many small towns dot their length so road gangs find sufficient supplies. Travel is rapid.

9. Cities. Come in three sizes-Cities, Large Cities and Very Large Cities. Cities had populations of over a hundred thousand inhabitants. Large Cities had populations of over one million Very large cities had populations of over five million.
The cities are the stomping grounds of a wide variety of social groups. Supplies are plentiful but can be exhausted. The larger the city, the more inexhaustible the supplies. Travel is no problem due to the multitude of highways and byways which allow easy bypass of streets choked with wrecks and abandoned vehicles.

10. Oilfields. Areas where petroleum was king. Some are offshore and inaccessible. Road gangs battle daily for access to the vast supplies of fuel available there.

11. Swamp. Swamp represents tracts of land which are soft and treacherous. Travel is impossible.

12. Devastated Areas. These cities destroyed by nukes are unpleasant at best. There is little to be gained in these places. Mutants are a constant danger.

13. Coasts, Small Islands, Cays and others. These consist primarily of water.

B. Winter
December, January and February bring unpleasant road conditions over all but the most southern portion of the map. Operations are slowed to a crawl under these conditions.

V. VEHICLES

A. Vehicle Attributes
The basic attributes of all vehicles are summarized on the Vehicle Table.

Those attributes not listed in the vehicle status report available during play can never be modified during play. Those attributes listed on the status report may be modified during play.

1. Mass Capacity and weight of a vehicle. Important when you ram the enemy.

2. Structure. The amount of damage the vehicle can take before being destroyed.

3. Maximum Speed. The maximum speed of the vehicle in MPH. Maximum speed can be reduced by the loss of tires during combat.

4. Maneuverability. The base number of turns a vehicle can make before each move. High speed and loss of tires will reduce maneuverability.

5. Braking. A vehicle can slow down ten MPH per Braking Factor each move.

6. Acceleration. A vehicle can speed up ten MPH per Acceleration Factor each move.

7. Missile Factor. The maximum number of crew which may fire through each facing of a vehicle.

8. Missile Protection. The amount of cover the vehicle affords against enemy fire through each facing. O is none, 5 is total.

9. Volleys. The maximum number of times a vehicle's crew may fire each fire phase.

10. Boarding Factors. This is the maximum number of crew who may board enemy vehicles or transfer among friendly ones.

11. Fuel Consumption. The amount of fuel a vehicle requires to move once. The vehicle may carry in its fuel tank fuel equal to twice its fuel consumption without taking up space in its carrying capacity.

MS = Mass
ST = Structure
MX = Max Speed in MPH
MN = Maneuverability
BR = Braking
AC = Acceleration

L/R = Left or Right Facing
F   = Front Facing
B   = Back Facing
T   = Topside Facing

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. 'O' 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 it's 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 sustain structural damage when they're hit in combat. This damage will only be repaired at various body shops you'll find while looting.

2. Flat Tires. Tires lost during combat must be repaired. Flat tires are replaced to the limit of the number of spares your gang is carrying.

C. IMPROVEMENTS
Vehicles may be improved during play by the discovery of certain special locations while searching for loot. Some enemy road gangs may drive improved vehicles in Tactical Combat by boarding and eliminating enemy crews.

VI. SUPPLIES

Supplies are obtained by searching for loot and by defeating enemy groups.

A. Carrying Capacity
The carrying capacity of your gang is a function of the mass of the vehicles. All supplies except ammo require a capacity equal to the number of units carried. Ammo requires no capacity to carry. Fuel equal to two times each vehicle's fuel consumption may be carried at no cost in capacity.

B. Consumption
Every night each member of your gang consumes one unit of food. Each time your gang moves, each vehicle consumes fuel equal to it's fuel consumption. Healers require various amounts of medical supplies in exchange for their services. Tires are consumed in repairing battle damage. Every time a member fires a gun one round of ammo is expended.

VEHICLE TABLE

VEHICLE	SIZE	MS	ST	MX	MN	BR	AC	MISSILE FACTOR L/R	F	B	MISSILE PROTECTION FACTOR L/R	F	B	TRS	BOARDING FACTOR L/R	F	B	CREW CAPACITY INT	EXT	FUEL	CARRYING CAPACITY	BASE COST
Motorcycle*	S	1	3	100	4	2	2	2	2	2	0	2	0	2	1	0	1	2	0	1	5	73
Sidecar	S	2	5	60	4	2	2	3	3	3	0/1	2	2	3	1	0	1	3	0	1	20	176
Compact Conv.	S	3	8	80	3	2	1	3	2	2	1	1	1	4	1/2	0	2	6	0	2	45	273
Compact H.T.	S	3	8	70	3	2	1	4	4	4	2	2	2	4	0/1	2	0	4	4	2	45	348
Midsize Conv.	M	5	13	90	2	2	1	3	2	3	1	1	1	4	2/3	0	3	8	0	3	125	490
Midsize H.T.	M	5	13	80	2	2	1	4	5	6	2	2	2	4	1/2	2	0	5	6	3	125	625
Sports Car Conv.	S	4	10	120	3	2	2	3	2	3	1	1	1	4	2/3	0	2	6	0	4	80	420
Sports Car H.T.	S	4	10	120	3	2	2	4	4	4	2	2	2	4	0/1	2	0	4	4	4	80	512
Station Wagon	M	6	15	80	2	2	1	6	5	6	2	2	2	4	2/3	3	3	8	9	3	180	858
Limousine	M	8	20	100	2	2	1	6	5	6	2	2	2	4	1/2	3	3	8	9	4	320	1184
Van	M	7	18	70	2	2	1	8	5	6	2	2	2	4	0/3	3	3	11	12	3	245	1071
Pickup Truck	M	9	23	80	2	2	1	6	4	3	1	2	1	4	4/5	0	3	14	2	4	405	1188
Offroad Conv.	M	6	15	70	2	2	1	2	2	2	1	1	1	4	1/2	0	2	4	0	4	180	528
Offroad H.T.	M	6	15	70	2	2	1	3	3	3	2	2	2	4	0/1	2	0	4	2	4	180	672
Bus	L	14	35	70	1	1	1	26	3	5	2	2	2	6	0/2	10	0	51	51	10	980	3864
Tractor*	M	10	25	40	2	1	1	3	3	3	0	1	0	0	2	0	2	3	0	6	500	1000
Construction Veh*	L	18	45	30	2	1	1	4	4	4	0	1	0	0	3	0	3	4	0	10	1620	2286
Flatbed Truck	L	16	40	80	1	1	1	14	4	4	0	2	0	14	6/7	0	4	51	2	8	1280	3088
Trailer Truck	L	20	50	80	1	1	1	14	4	8	5	2	0	18	0	10	5	51	50	10	2000	6160

C. Cache

You may stash up to two hundred fifty-five units each of food, tires, firearms, fuel and medical supplies in each city. Supplies may be freely transfered between your gang's supplies and your cache while in that city.

D. Special Supplies

There are three special kinds of supplies that your gang starts with: Food Supplements, Snow Tires and Fuel Additives. Food Supplements and Fuel Additives halve your consumption of these supplies. Snow tires increase your speed in the winter. You can lose your special supplies through a variety of ways and replenish them while searching for loot.

VII. PEOPLE

A. Gang Members

1. Quality. Almost all people encountered will be rated Armsmaster, Bodyguard, Commando, Dragoon or Escort, in order of decreasing effectiveness. They are often referred to as A, B, C, D, and E troops. A member's quality reflects how likely he is to survive an event and his offensive and defensive powers in combat. After being in combat, some or all of your crew may promote to the next highest rating.

2. Recruiting. Gang members may be recruited by searching for people and sending envoys. The higher the quality of the prospect, the less likely they are to join your gang.

3. Cronies. These individuals can be of invaluable aid in your travels. Only one of each will travel with you. If another is encountered and you accept him into your gang, your current specialist will leave. Each of these individuals practices his trade with a varying degree of skill.
    a. Doctor. A doctor reduces your casualties from disease, accidents and in foot combat. The better the doctor, the fewer the casualties. You must judge the effectiveness of his work.
    b. Drill Sergeant. A drill sergeant increases the number of members who promote after combat and decreases your loses to desertion and recklessness.
    c. Politician. A politician can serve as your envoy in footgang encounters and as a liaison with bureaucrats. He can even talk a lesser politician out of offering to join.

B. Encounters.

These are special encounters you may have while searching for people.
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 time.

2. Healers. Healers are the remnants of the medical community. Bound together by the common oath, they have gathered into informal research groups to aid the sick and injured and research remedies to disease. They ask to be supplied with medical goods. They heal all those who seek them. They have come up with anti-toxins which cure mutant infections. They live primarily in cities.

3. Foot Gang Commands. When you encounter a group on foot you have four options:
    a. Sending Envoys. A dangerous mission, but the best way to gain recruits. Showing strength can prove beneficial. A good politician may save you the trouble of sending troops.
    b. Firing a Volley. This is the ultimate show of strength. It also tends to cause bad feelings among the recipients and can start a firefight.
    c. Waiting. Waiting will be taken by some as a sign of weakness.
    d. Leaving. A sign of weakness understood by all.

4. Foot Gangs. The different types of gangs you'll meet on foot include:
    a. Soldiers. Isolated units of military personnel. It is dangerous to quarrel with them, but it's seldom necessary as they are willing to join a good cause.
    b. Hoodlums. A mixed lot of marginal character. Generally well led but poorly disciplined.
    c. Home Guard. Poorly trained and equipped militia. Little better than armed rabble. Unpredictable.
    d. Civilians. Mobs of cowering and inoffensive souls. Many are willing to join if you want them.
    e. Cannibals. They are wily and fond of ambushing envoy parties. The scum of the earth.

5. Foot Gangs. In cities you'll encounter gangs like:
    a. MERCENARIES. Soldiers of fortune, mercenaries are groups of well-trained ex-military types. It is dangerous to quarrel with them, but it is seldom necessary as they generally are willing to ally with a stronger 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. Any one might give his life for a mouthful of food.

    e. CANNIBALS. They are wily ones, fond of ambushing envoy parties. The scum of the earth.

6. 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 GANGSTERS. 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. THE REBORN. These are pleasant folk with a single aim, to live in peace.

f. 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.

g. THE MOB. The country's second government holds a few cities.

h. INVADERS. These soldiers from other shores have some degree of control in all coastal and southwestern areas. The invaders are very dangerous.

i. MUTANTS. These are diseased, psychotic zombies who want to tear all healthy people to pieces.

7. ROAD GANGS

a. ARMED RABBLE. Some can operate a vehicle. More annoying than dangerous.

b. RENEGADE NATIONAL GUARDSMEN. More common in hinterlands. Their excellent armament make them dangerous foes.

c. CANNIBALS. Poorly armed and led, they are easily dispatched.

d. TURF GANGS. Most are well armed, and many drive modified vehicles. Their training is above average.

VIII. ROAD COMBAT

A. Abstract Road Combat

In abstract road combat your vehicles fight on their own, you have no tactical choices to make. Combat is based on the mass of the vehicles on each side, with the advantage going to the larger vehicles and better crews. Check the condition of your vehicles after each abstract combat.

B. Crew Deployment

1. Auto-Deployment. The computer will place all your men into vehicles. They will be distributed as evenly as possible between the vehicles by quality of troops. Guns will be distributed to as many vehicles as possible. Following auto-deployment, you will have the opportunity to adjust your troop and weapon allocations.

2. Manual Deployment. You must allocate you men to vehicles manually, one man at a time. Type an A to allocate an Armsmaster to a vehicle, a B to allocate a Bodyguard, and so on. Type 1 or 2 to toggle between Firearms and Crossbows for the first and second volley. One half of the crew of each vehicle is considered to constitute a volley.

C. Quick Combat

1. Ram Ratio. Determines the size of enemy vehicles which you will ram. A ram ratio of one means you'll ram vehicles of equal or lesser mass. A ram ratio of two means you'll ram vehicles of half your mass or less and so on. A ram ratio of one half means you'll ram vehicles twice your mass.

2. Aiming Priority. This determines the percentage of your group's fire aimed at each location: topside, interior or tires. Each number must be from one to eight. The total of the three numbers must be exactly ten.

D. Tactical Combat

1. Deploying Vehicles on the Tactical Map
   a. Deployment Area. All vehicles must be deployed in spaces with an x coordinate of ten through nineteen. There is no limitation on the y coordinate.
   b. Restrictions. Vehicles may never be deployed on trees, rocks, fences, wrecks, water, or buildings. In farmland, vehicles may not deploy in mud or tilled fields. In cities and on highways, vehicles may only deploy on roads.

2. Movement on the Tactical Map
   a. Changing Speed. A vehicle may accelerate or brake in any one move, but never both. All changes in speed must be completed before a vehicle moves. Changing speeds may be interspersed with turning maneuvers.
   b. Maneuvering. Maneuverability represents the number of forty-five degree turning movements it may execute before a move. This is reduced by tire damage and high speeds. A vehicle's maneuverability will be reduced by one when it's moving faster than thirty MPH, and by one for every additional thirty MPH. Reduction due to tire damage is proportional to the fraction of the tire lost. An unmoving vehicle may never be maneuvered. A vehicle moving at ten MPH may make as many turns as you like.
   c. Moving Vehicles. Move straight ahead on e space at a time. Movement ends a vehicle's turn, therefore all speed changes and turning maneuvers should be completed before moving.

3. Terrain Effects
   a. Speed Loss. All terrain except roads may cause a ten MPH loss of speed when entered.
   b. Fishtailing. When a vehicle enters mud, there is a chance it will lose traction and swerve to a different facing.
   c. Collisions. Vehicles which attempt to enter terrain such as rocks, oil derricks, trees wrecks fences will be halted and suffer damage.
   d. Water. Driving a vehicle into water is a sure way to lose the vehicle and all aboard.

4. Ramming. Whenever a vehicle attempts to enter a space occupied by another vehicle (enemy or friendly) a ram occurs. Both vehicles will receive structural damage and either or both may be destroyed.
   a. Structural Damage. The amount of structural damage incurred by each vehicle in a ram is dependent on the speeds, masses and relative facings of the vehicles. The faster the speeds, the greater the damage. Head-on rams are the most destructive, broadside rams are average and front to rear rams are the least destructive. In any ram, each vehicle will be

damaged in inverse proportion to the ratio of it's 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.

b. Speed Alterations. A ram may cause either or both vehicles to speed
up or slow down.

c. Overruns. If one vehicle involved in a ram outmasses the other by a
great deal, the smaller vehicle may simply disintegrate with little
effect on the larger vehicle.

5. Fire Combat

a. 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, no second volley will be allowed.

b. Facing. Each volley a vehicle fires must be directed through either
the left, right, front or back facing of the vehicle. This facing affects
the number of men which may fire in a volley.

c. Line of Sight. Vehicles cannot see or fire through trees or buildings.
To check the line of sight , press a facing key (L,R,F,B,) while holding
the control key down.

d. Weapon Types. There are two types of projectiles, crossbows and guns.
Crossbows have a maximum range of five spaces. Guns have a maximum range
of ten spaces and are more accurate than crossbows at equal range. Both
types suffer loss of accuracy due to range. Men armed with guns will
resort to crossbows if all ammo is exhausted.

6. Boarding Combat. Boarding is the only way to capture a vehicle from
an enemy road gang. An enemy road gang's modified vehicles may be the
most important prize from an encounter.

a. Limitations on Boarding. Men may only board an enemy vehicle which is
horizontally or vertically adjacent or directly in front of or behind
their current vehicle. Men may be killed attempting to board enemy
vehicles. There may never be more boarders on a vehicle than it's total
crew capacity. This limitation does not include the vehicle's crew in
calculating the maximum allowable boarders. At least one crewman must stay
inside each friendly vehicle to drive it.

b. Order of Combat. In boarding combat the vehicle's topside crew first
attack any boarders. Next, boarders attack topside crew. If no topside
crewmen remain, the boarders attack the vehicle's interior crew instead.
Finally, interior crewman attack any remaining boarders. A round of combat
may end with both crew and boarders still aboard. Combat will be continued
in the next boarding segment.

c. 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.

d. Crew Transfers. Any vehicle which has no enemy aboard may transfer
crew between the interior and topside locations of that vehicle. If no
enemy boarders are present 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. Such crew will automatically become topside crew on the second
vehicle. Men may be killed attempting to transfer between friendly
vehicles. In all crew transfers, crew limitations of the receiving vehicle
may not be exceeded. At least one crewman must stay aboard each friendly

HOTLINE

If you have any questions
or problems regarding the
program or game, please
send a stamped, self-
addressed envelope with
your question to:
Wizardware Group, Inc.
5700 W. Broadway, #300-A
Minneapolis, MN 55428-3590

or call: 612-537-4085