

Task Difficulty Levels

Difficulty	Asset
Easy	x4
Average	x2
Difficult	x1
Formidable	x ¹ / ₂
Impossible	x ¹ / ₄

Foraging Table

Area	Winter	Spring	Summer	Fall
Wood/Scrub	1	3	6	6
Meadow/Swamp	0	1	2	2
Field	0	0	25	50
Fishing (1D6x)	¹ / ₂	2	1	1

Fatigue Effects on Fire

Range	Addition to Die Roll per Fatigue Level
Short	3
Medium	2
Long	1
Extreme	1

Human/Animal Hit Location

Die	Biped	Quadruped
1	Head	Head
2	Right arm	Forequarter
3	Left arm	Forequarter
4	Chest	Forequarter
5	Abdomen	Chest
6	Abdomen	Chest
7	Right leg	Abdomen
8	Right leg	Hindquarter
9	Left leg	Hindquarter
10	Left leg	Hindquarter

Biped: Table assumes front/rear shot.

Side Shot: Far side hit equals near side hit.

Prone Biped: Table assumes top shot.

Side Shot: Far side hit equals near side hit.

Front Shot: Leg or abdomen hit equals miss.

Rear Shot: Head, arm, or chest shot equals miss.

Quadruped: Table assumes side shot.

Front Shot: Hindquarters or abdomen hit equals miss.

Rear Shot: Head or forequarters hit equals miss.

Firing Range Difficulties

	Difficulty	
Range	Aimed Shot	Quick Shot
Short	Average	Difficult
Medium	Difficult	Formidable
Long	Formidable	Impossible
Extreme	Impossible	Not Allowed

Encounters

Terrain

Die	Road	Wood	Swamp	Hill	Clear	River
0	Group	Group	Group	Group	Group	Group
1	Group	Group	Group	Group	Group	Group
2	Group	Animal	Item	Animal	Item	Item
3	Group	Group	Group	Item	Animal	Hazard
4	Item	Animal	Animal	Group	Group	Hazard
5	Item	Item	None	Animal	Item	None
6+	None	None	None	None	None	None

Group Encounters

Item Encounters

Item	Org.	Ind.	Ins.	Ter.	An.	Dev.	Dsp.	Cnt.
Village	1,2	1,2	1,2	1,2	1	—	1	1
Ruined village	—	—	—	3	2	1,2	2	—
Farm	3,4	3,4	3	4	3	—	3	2
Ruined farm	—	5	4	5,6	4	3,4	4	3
Roadblock/ camp	5,6	6,7	—	7	—	—	5	4
Supply dump	7	—	—	—	—	—	6	5
Abandoned supply dump	—	—	5	—	5	5	—	6
Repair yard	8	—	—	—	—	—	7	7
Abandoned repair yard	—	—	6	—	6	6	—	8
Field hospital	9	8	—	—	—	—	8	9
Abandoned field hospital	—	—	7	—	7	7	—	10
Crater	10	9	8	8	8	8	—	—
Derelict vehicle	—	10	9	9	9	9	9	—
Derelict convoy	—	—	10	10	10	10	10	—

Group Encounters

Group	Org.	Ind.	Ins.	Ter.	An.	Dev.	Dsp.	Cnt.
Marauders	1	1	1,2	1,2	1,2	1,2	1	—
Patrol	2,3	2	—	—	3	3	2,3	1,2
Mil. convoy	4,5	—	—	—	—	4,5	4,5	3,4
Merchant convoy	6	3,4	3	—	—	—	—	5
Refugees	—	—	—	3,4	4,5	—	6,7	—
Slavers	—	5	4	5	6	6	—	—
Hunters	7	6,7	5,6	6	7	7	—	6
Primitives	—	—	7	7	8	8,9	—	—
Smugglers	8	8	8	8	9	—	—	7
Large unit	9	9	9	9	—	—	8,9	8,9
Stragglers	10	10	10	10	10	10	10	10

Territories

Die	Territory	Encounter DM
1	Organized	-1
2	Independent	0
3	Insular	0
4	Terrorized	0
5	Anarchy	+1
6	Devastated	+2
7	Disputed	-1
8	Cantonment	-1

Encounter Statistics

<i>Group</i>	<i>Number</i>	<i>Observation</i>	<i>Type</i>	<i>Weapons</i>	<i>Heavy Weapons</i>	<i>Transport</i>
Marauders	1D6x1D6	80	X/N	Military	1-3	1-2: H, 3-4: V
Patrol	1D6+6	80	V/X	Military	1-4	1-2: H, 3: V, 4: A
Military convoy	1D6x6	60	X/N	Military	1-2 each	1-2: W, 3-6: V
Merchants	1D6x4	80	V/X	Civilian	1 each	1-4: W, 5-6: V
Refugees	1D6x5	40	N	Poor	None	None
Slavers	1D6+4	80	V/X	Military	1-2	1-4: H
Hunters	1D6	60	X/N	Civilian	None	1-2: H
Primitives	2D6	60	X/N	Poor	None	None
Smugglers	2D6	60	X/N	Civilian	None	1-2: H, 3-4: W, 5-6: V
Large unit	1D10x10	80	V/X	Military	Yes, each	1: A, 2: H, 3: V, 4: Arty
Stragglers	1D6	60	X/N	Military	None	1: H

Transport Abbreviations: *H*: Horse *V*: Motor vehicle *W*: Wagon *A*: Armored vehicles *Arty*: Artillery.

Encounter Equipment

<i>Die</i>	<i>Heavy Weapons</i>	<i>Artillery</i>	<i>Motor Vehicles</i>	<i>Armored Vehicles</i>	<i>Military Cargo</i>	<i>Merchant Cargo</i>
1	AT missile	Rapira-3	5-ton	Tank	Ammo	Scrap metal
2	AT rocket	Mortar	5-ton	Light AFV	Parts	Machinery
3	Grenade launcher	Mortar	2 1/2-ton	Light AFV	Medical	Food
4	Machinegun	Howitzer	2 1/2-ton still	APC	Food	Wool
5	Machinegun	Howitzer	3/4-ton	APC	Fuel	Clothing
6	Machinegun	SPA	UAZ-469	IFV	Weapons	Furnishings

European Animal Encounters (1D6)

Die	Terrain			
	Wood	Swamp	Hill	Clear
1	Boar	Boar	Boar	Game
2	Fowl	Fowl	Fowl	Fowl
3	Game	Game	Game	Game
4	Grazer	Grazer	Grazer	Wild Cattle
5	Dogs	Dogs	Dogs	Dogs
6	Bear	Game	Bear	Dogs

European Animal Data

Animal	# App	Size	To Hit	Dam	Pen	Rng	Hits	Atk	Init	Arm	Behavior	Speed
Grazer	2D6	100	2	2	Nil	S	20	A	6	—	F15/A7	10/20/60
Bear	1	400	12	5	Nil	L	40	A+A	5	—	A7/F7	10/20/40
Boar	1	100	2	2	Nil	S	20	A	6	—	F12/A7	6/10/30
Dog	3D6	25	4	4	Nil	S	6	DB+A	6	—	Am/F7	15/30/60
Game	2D6	50	2	2	Nil	S	6	A	6	—	F18/A2	10/20/40
Fowl	2D10	1	8	1/2	Nil	S	1	A	7	—	F16/A2	6/20/80*
Wild Cattle	1D10	800	2	4	Nil	S	50	DB	5	—	F11/A7	10/20/40

*The speeds listed here are Walk/Trot/Fly rather than Walk/Trot/Run.

Item Information

Item	People	Type	Weapons	Goods
Village	See pages 167-168.			
Ruined village	None	—	—	1-2: Food, 3-4: Mrcht
Farm	2D6	X/N	Civilian	Food
Ruined farm	None	—	—	1-2: Food
Roadblock/camp	Patrol/marauder band (see Encounter Statistics Table on page 159).			
Supply dump	3D6	X/N	Military	Military
Abandoned supply dump	None	—	—	1-2: Military
Repair yard	3D6	X/N	Military	Parts, vehicles
Abandoned repair yard	None	—	—	Derelict, 1-4: Parts
Field hospital	3D6	X/N	Military	Medical
Abandoned field hospital	None	—	—	1-3: Medical
Crater	None	—	—	—
Derelict vehicle	None	—	—	—
Derelict convoy	None	—	—	1-2: Mil, 3-4: Mrcht

Demolition

DP	Concussion/Penetration*
1	3
2	4
3	6
4	7
5	8
7	9
8	10
9	11
11	12
13	13
15	14
18	15
32	20
50	25
72	30
96	35
128	40
162	45
200	50

*Penetration is modified by emplacement. *Tamped:* Pen×2. *Laying on or Leaning Against:* Pen+2.

Direct Fire Combat

Attack Type	Difficulty	Asset	Effect
Fire, Short Range	Average	Appropriate to Weapon	Damage by Weapon
Fire, Medium Range	Difficult	Appropriate to Weapon	Damage by Weapon
Fire, Long Range	Formidable	Appropriate to Weapon	Damage by Weapon
Fire, Extreme Range	Impossible	Appropriate to Weapon	Damage by Weapon
Fire, Quick	+1 Level*	Appropriate to Weapon	Damage by Weapon
Fire, Target Obscured	+1 Level	Appropriate to Weapon	Damage by Weapon
Fire, Automatic	**	**	Damage by Weapon

*Not possible at extreme range

**See automatic fire rules (page 203)

Indirect Fire Combat

Attack Type	Difficulty	Asset	Effect
Conventional	Formidable	Forward Observer*	Explosive Damage
Hand-Held	Impossible	Grenade Launcher*	Explosive Damage

* Or appropriate weapon asset of the firing character, whichever is lower. Bonuses for repeated fire.

NPC

Initiative

NPC Type	Initiative
Elite	5
Veteran	4
Experienced	3
Novice	1

Melee Weapons

Weapon	Range	Hit Mod.	Damage Value
Bottle	S	—	1D6+2
Knife*	S	+2	1D6
Hatchet	S	—	1D6+(Strength+2)
Club	S	-1	1D6+(Strength+2)
Bayonet†	L	+1	1D6+(Strength+2)
Spear	L	—	1D6+(Strength+2)
Axe	L	-2	1D6+Strength
Machete	L	+1	1D6
Garotte	S	+1	Special**

*Including bayonet, when not on rifle.

†When on rifle. **Unarmed Combat Damage ×2.

Slight Wounds: A slight wound immediately reduces the character's Initiative rating by 1 point. However, characters never suffer more than one Initiative reduction for slight wounds, regardless of how many they suffer. Slight wounds have no other effect on combat, although the referee may decide to penalize actions making use of slightly injured arms or legs.

Serious Wounds: A serious wound reduces a character's effective Strength by half (rounding the final Strength rating down) and causes an additional immediate 2-point reduction of the character's Initiative rating (for a total of 3, including the slight wound reduction). Characters whose Initiative ratings are reduced to 0 or less may not take any further actions during this combat.

The number of rounds in a burst is the number listed in the weapon's ROF column. Each individual shot fired in a burst is resolved separately as a marksmanship task at the Impossible difficulty level, regardless of range.

First aid is a Difficult task versus Medical (TraumaAid), assuming a doctor's medical kit is on hand. If such a kit is not available, the task becomes Formidable. Use of a personal medical kit allows a character with neither Medical skill nor a doctor's medical kit to avoid the unskilled penalty when attempting a first aid task (thus it is a Formidable roll against the character's EDU attribute). The personal kit is

Panic: Whenever a character is knocked down by wound damage (see "Wound Effects and Healing," page 211) or surprised (attacked from an unexpected direction, ambushed, or surprised by an encounter as defined in the encounter rules), there is a chance that he or she will panic. This is not blind panic which sends the character screaming away, but panic which causes him or her to momentarily freeze.

To determine if a PC panics, roll 1D6. If the result is greater than his or her Initiative rating, he or she panics. The PC may not conduct any action for the number of turns by which the die roll exceeds his or her Initiative. However, if the character is forced to freeze for more than one combat turn, he or she may go prone on the second turn and remain there until able to move again. If the character has already conducted his or her action for the turn, the following turn counts as the first turn frozen. If the character has not yet acted in the turn in which he or she panicked, the current turn becomes the first turn frozen.

Knockdown: If a character suffers more points of damage in a combat turn than his or her current Agility, he or she is knocked down and may not conduct any other action for the rest of the current turn. Concussion damage counts the same as gunshot and fragmentation wounds for determining knockdown, but burn damage does not.

Stun: Any damage to the head, including burn damage, has a chance of stunning the character. To avoid stun, roll 1D6 and add the damage suffered from the wound. If the result is equal to or less than the character's Constitution, he is unaffected. If the result is greater than his Constitution, he is stunned. Stunned characters must make a roll against their Constitution each turn in order to regain consciousness. The task is Difficult if the result was equal to or less than twice the character's Constitution, and is Formidable if the result was greater than twice the character's Constitution. This roll is made during the character's normal Initiative step of the turn. If successful, the character is conscious, but may not act in the current turn. The character may act normally in the following turn.

For example, a character suffers a wound to the head with a damage of 6 and rolls a 5, for a total of 11. His Constitution is 9. He must make a Difficult roll against his CON (rolling a 9 or less) at his Initiative step each turn until he regains consciousness.

Stunned characters are automatically also knocked down.

Sleep: No other activity is possible while sleeping.

Each character must have one period of sleep per day or two periods of sleep if he or she has performed three or more periods of hard work. For every sleep period deficiency, the character suffers one level of fatigue. A fatigued character will recover one fatigue level for every period spent in sleep.

Rest: Rest is a poor substitute for sleep, but can help combat its lack. A character riding in a vehicle and not serving as a driver or lookout can rest. While rest does not count toward a character's sleep requirement, a fatigued character recovers one level of fatigue for each period spent resting.

Easy Work: Hunting and foraging, routine maintenance, guard duty, setting up and tearing down camp, preparing meals, driving a vehicle on a road, and simple first aid are all examples of easy work. Easy work neither increases nor decreases a character's fatigue level.

Hard Work: Hard work constitutes tasks which are extremely fatiguing. These are marching, riding an animal or bicycle, driving a vehicle cross-country, fighting, and actual physical labor (including, but not limited to, farming, building bridges and buildings, digging ditches or entrenchments, carrying out major repairs on heavy machinery, etc.). Some referee discretion is required when deciding which tasks constitute hard work. Changing a flat tire, for example, is not particularly heavy labor; changing an axle is. A few minutes of hard work in a period do not make it a period of hard work; it takes a substantial quantity to do so, with one exception: Any combat whatsoever in a period, however brief, makes it a period of hard work.

Contaminated Water

Present: 12+ (2D6)

1D10	Disease
1-3	Dysentery
4-7	Typhoid
8-10	Minor disease

Encampment Diseases

Present: 10+ (2D6)

1D10	Disease
1	Dysentery
2	Food poisoning
3	Minor disease
4	Cholera
5	Hepatitis-A
6	Pneumonia
7	Typhoid
8	Typhus
9	Bubonic plague
10	Pneumonic plague

Settlement Diseases

Present: 11+ (2D6)

1D10	Disease
1	Dysentery
2-3	Food poisoning
4-5	Minor disease
6	Cholera
7	Hepatitis-A
8	Pneumonia
9	Typhus
10	Bubonic plague

Animal Diseases

Present: 12+ (2D6)

1D10	Disease
1-4	Food poisoning
5-7	Minor disease
8	Typhus
9	Rabies
10	Bubonic plague

Combat Actions

Aim: Aiming allows the best possible chance to hit a target. The aim action can be used in two different ways. First, it can be done immediately before a fire action in order to aim at a specific announced target. This allows resolution of the subsequent shot against that target (conducted in the following combat turn, or by a high-Initiative character, later in the same turn) as an aimed shot (aimed shots are explained under "Direct Fire," page 202).

Second, a character may aim at a certain target or area in order to conduct opportunity fire.

Aiming at a target or area also enables a character to fire at any target which later moves through his or her line of sight. This is called opportunity fire. To continue waiting for a target to come into view, merely continue to conduct an aim action each turn.

Reload: It generally takes one combat turn to reload a weapon, although some take longer (and thus require several reload actions to finish).

Ready/Change Equipment: This can consist of putting down your rifle and taking out a knife, drawing a pistol, linking two ammo belts together, readying a radio to transmit, etc.

Crawl: The character moves two meters in a prone posture.

Drive: This is the action used by the driver of a vehicle to move the vehicle during the turn. The movement rate varies with vehicles and with the risks that a driver is willing to take to drive faster. These details are discussed on page 214.

Fire: The character fires his or her weapon at any target which is currently visible to the character or which has been visible during the current turn at some point. With some weapons this may be combined with a walk or trot. If the fire action is conducted against a target which the character is currently aiming at (having expended his or her previous action to do so), the fire is executed as an aimed shot.

If the fire is made at a target that the character was not aiming at, it is executed as a quick shot. Aimed and quick shots are explained on page 202 under "Direct Fire."

Mount/Dismount: Getting on or off of a vehicle or riding animal.

Ride Animal: This is the equivalent of a drive action, but for riding animals.

Run: The character moves 30 meters (three grid squares).

Take Cover: The character dodges behind any close-by cover (see "Cover" on pages 209 and 217).

Go Prone/Stand Up: A crawling character is prone. A prone character may stand up at any time, either as an action by itself or as part of a walk, trot, or run action. Standing up cuts the distance moved in an action in half.

Talk: Players will want to discuss their plans, but the referee should be careful to keep these discussions within the bounds of reality. Since each action is only five seconds long, the referee should not allow a player to say more than one sentence or so during a combat turn. While talking can be combined with most other actions, it cannot be combined with firing.

If trying to talk on a radio, a player must first spend a turn opening contact. Each radio has its listed short range, at which difficulty is Average. Ranges and difficulty levels increase the same as fire combat (i.e., Difficult at medium [2xshort] range, etc.). The player must also give his or her call sign and that of the character being called, as in "Red Dog, this is Can Can. Over." Unless the other character has a communicator ready to transmit, it will probably take an action to ready it and then another to transmit a reply. The reply may be "Can Can, this is Red Dog. Go ahead. Over," but is more likely to be simply, "Red Dog. Go."

The referee should be fairly strict in enforcing the need for acknowledgements before new transmissions are sent.

Danger Zone: The danger zone is the area where persons not actually aimed at may be hit by stray shots from a burst of automatic fire.

The danger zone is an area five meters to either side of a line drawn between the firing character and the target, and includes all potential targets which are within the same range band as the target. However, the danger zone is never wider than the distance to the target from the firing character. That is, if firing at a target at short range, the danger zone is one meter wide one meter away from the firing character, two meters wide two meters away, and so on until it reaches its maximum width (10 meters at a range of 10 meters).

Once a player has rolled all of his or her automatic fire hit dice and noted how many rounds hit, the player takes half of the dice which missed (rounding fractions down) and rolls them again, using the same Impossible skill roll rolled for the original hits. Each hit rolled on this second set of dice is inflicted on another target in the danger zone. The referee will assign these hits to the other targets, beginning with those closest to the intended target.

Any dice which missed from this second roll (or half of all dice which missed from the first roll, if there were no other potential targets) are set aside and will be used to attack any character moving through the weapon's danger zone for one full turn. A full turn for the purposes of this rule is the remainder of the

The number of rounds in a burst is the number listed in the weapon's ROF column. Each individual shot fired in a burst is resolved separately as a marksmanship task at the Impossible difficulty level, regardless of range.

<i>Burst Size (rounds)</i>	<i>Dice lost per range band beyond short</i>
3	1
5	2
10	3

Firing Range Difficulties		
<i>Difficulty</i>		
<i>Range</i>	<i>Aimed Shot</i>	<i>Quick Shot</i>
Short	Average	Difficult
Medium	Difficult	Formidable
Long	Formidable	Impossible
Extreme	Impossible	Not Allowed

<i>Burst Size (rounds)</i>	<i>Dice lost per point of extra recoil</i>
3	1
5	1
10	2

Recoil: Recoil is a measure of how much a weapon kicks when it is fired, which affects accuracy. Recoil affects only small arms in the game, not heavy weapons. Each small arms weapon has a recoil value for a single shot. If it is capable of automatic fire, it also has a recoil value for firing a burst. Whenever a character fires a small arms weapon, total the amount of recoil the weapon generates that turn by multiplying the recoil of a single shot or a burst by the number of single shots or bursts fired.

Once you know how much recoil the weapon generates in a turn, compare the total to the firing character's Strength. If the recoil is equal to or less than his or her Strength, fire is resolved normally. If it is greater than his or her Strength, reduce the hit number by the difference.

For example, a character with a Strength of 7 is firing two single shots from a pistol which has a single shot recoil value of 5. The cumulative recoil is 10 (2x5), and the final hit number would be reduced by 3 (10-7). If the character were firing an aimed shot with a chance of hitting on a 7 or less and one additional quick shot with a chance of hitting on a 3 or less, the hit chances would be reduced to 4 for the aimed shot and 1 for the quick shot (all other factors being equal). The same character firing one shot from the pistol would have no reductions in hit chance. While high-recoil weapons can physically be fired as quickly as low-recoil weapons, it is often counterproductive to do so. The effects of recoil on automatic fire are different and are treated under "Automatic Fire," page 203.

Pistol Recoil: Pistols may be steadied by using both hands and bracing oneself. This may only be done while stationary, and reduces the printed recoil by 1.

Instruction: A character may be taught a skill. Teaching a skill is Difficult: Instruction. The instructor may teach a number of students equal to his Instruction skill level and must have a skill level in the skill being taught. An instructor cannot teach a student whose skill level in the subject taught is equal to or greater than that of the instructor. The task takes one period per day for one week (seven consecutive days). Successful completion of the task (rolled for at the end of the week) results in experience points for both the students and the instructor. The instructor gains experience for accomplishing a task as explained in the experience rules. Students gain a number of experience points (in the skill being taught) based on the number of students being taught.

If the number of students is less than half of the instructor's skill level, each student gains three experience points. If the number of students is half or more of the instructor's skill level, each student gains one experience point.

Advance by Observation: If a player observes another player successfully accomplishing a task, the observing player gains one experience point. This observation must be a close-up examination of the task and must have the cooperation of the character actually performing the task. If the referee considers the skill sought to be a complicated one (such as Mechanic), the task should take longer than usual (perhaps substantially longer), as the character performing the task will often have to pause to explain what he is doing or to answer questions. A character may gain experience points from observation only if the observed character's skill level is at least twice as great as the skill level of the observing character.

Automatic Success or Failure: In Twilight 2000, a task roll of 1 always results in success, and a task roll of 20 always results in failure, regardless of skill, asset, or difficulty level. Thus every character stands a chance to succeed, no matter how daunting the task, or a chance to screw up, no matter how seemingly routine the task. (Note that the automatic failure roll is modified to 17-20 for purposes of direct fire only—see the Combat chapter.)

Conversion: Experience points are converted to increases in skill levels during a lull in the characters' activities, perhaps during a day spent in rest and maintenance (the periods between active adventuring, in other words). When the referee thinks the time is right, the characters' accumulated experience points may be converted to increased skill levels.

Outstanding Success: A character who attempts a task and beats the target number by 10 or more has achieved an Outstanding Success. If, for example, a character had a target number of 12, and rolled a 2 ($12-2=10$), that would be an Outstanding Success.

Catastrophic Failure: This is the opposite of Outstanding Success. A character who fails in a task, and fails by at least 10, *may have* suffered a Catastrophic Failure. To find out, the character rolls again for the same task at the same difficulty level. If this roll also fails (by any margin at all, not just by a margin of 10 or more), then the character has suffered a Catastrophic Failure (if the roll succeeds, it's just a regular failure). As with the Outstanding Success, the consequences of this are up to the referee. For example, the engineer in the previous example might not only fail to repair the power plant, but would in addition break some other important part. The character trying to break down the door might hurt her shoulder in addition to not breaking down the door.