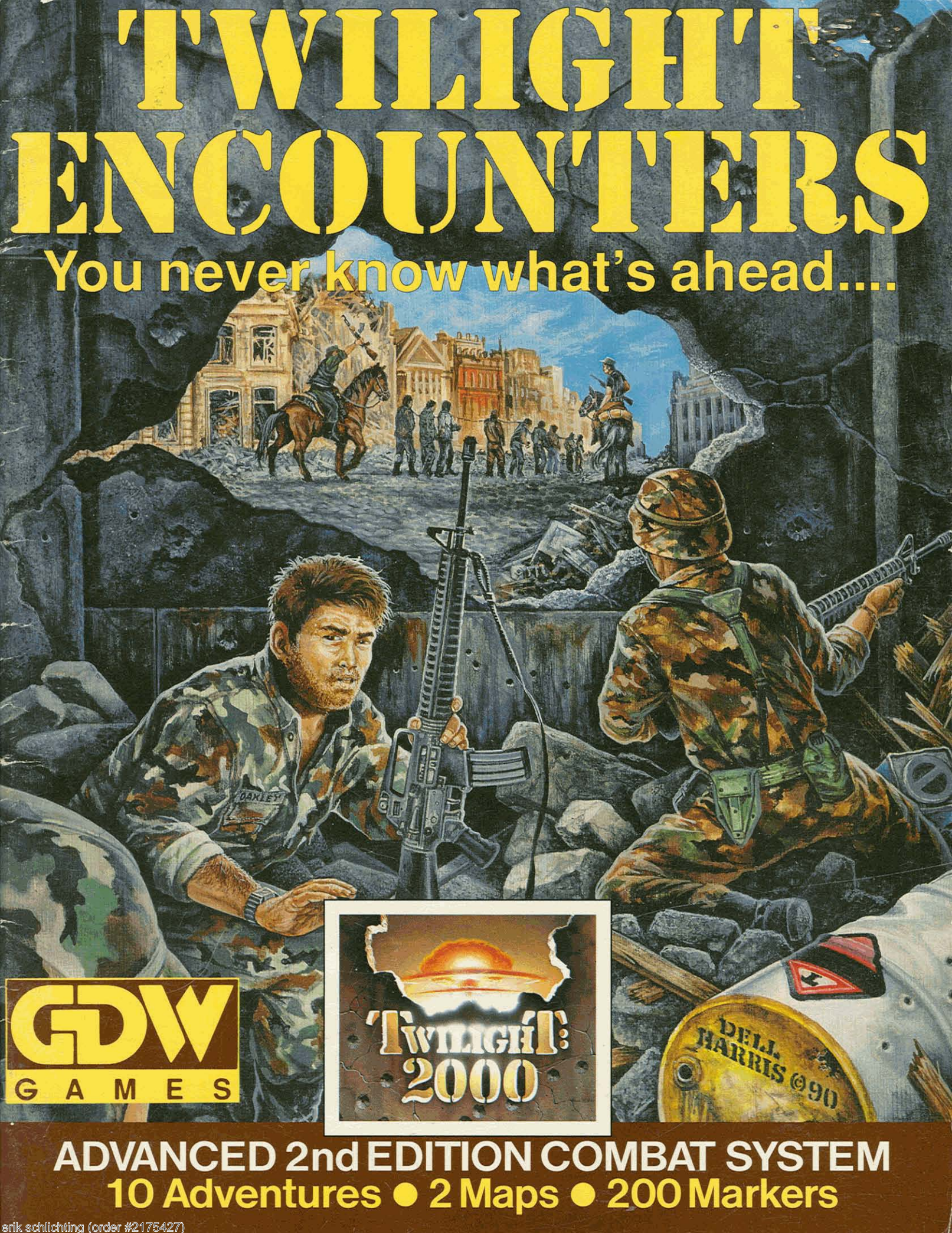
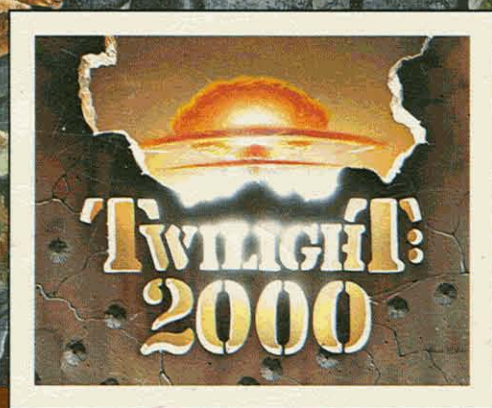


TWILIGHT ENCOUNTERS

You never know what's ahead....



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GAMES



ADVANCED 2nd EDITION COMBAT SYSTEM
10 Adventures • 2 Maps • 200 Markers

TWILIGHT ENCOUNTERS

You never know what's ahead....

GAME RULES

TWILIGHT: 2000



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Twilight Encounters

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Twilight: 2000 is GDW's trademark for its role-playing game of survival in a devastated world.

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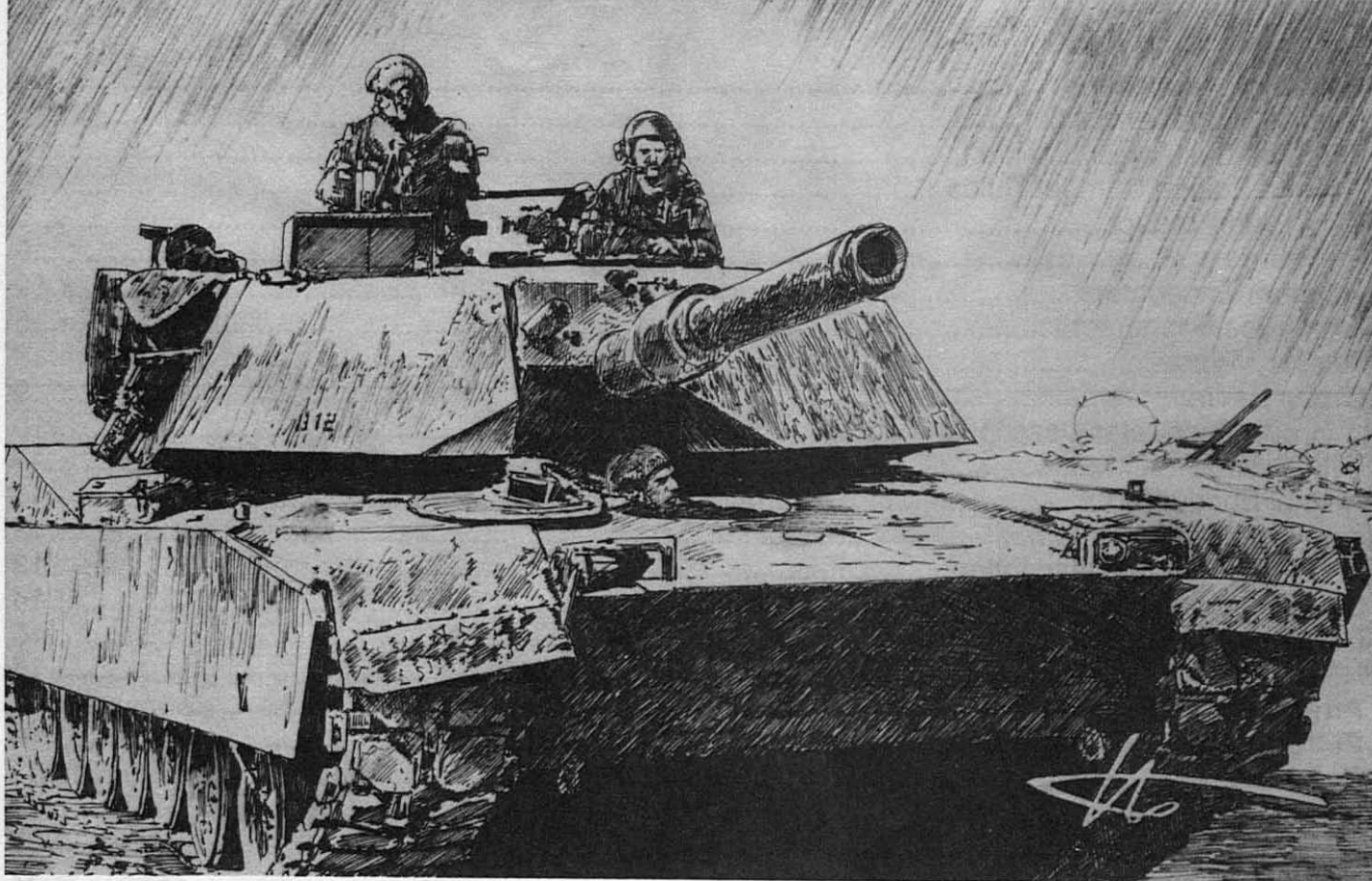
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TWILIGHT ENCOUNTERS

This product is a thorough revision and expansion of the encounter system for **Twilight: 2000**. Beyond that, it also includes the second edition combat system for the game. This system is the result of considerable thought, research, and customer feedback, and was not undertaken lightly.

The section on combat rules contains extensive commentary designed to explain our thinking behind the changes and make them easier to understand. We hope you will feel, as we do, that the inconvenience of change is more than offset by a system which is both more realistic and easier to use than the first edition combat system.

GAME COMPONENTS

The following components are included in this game:

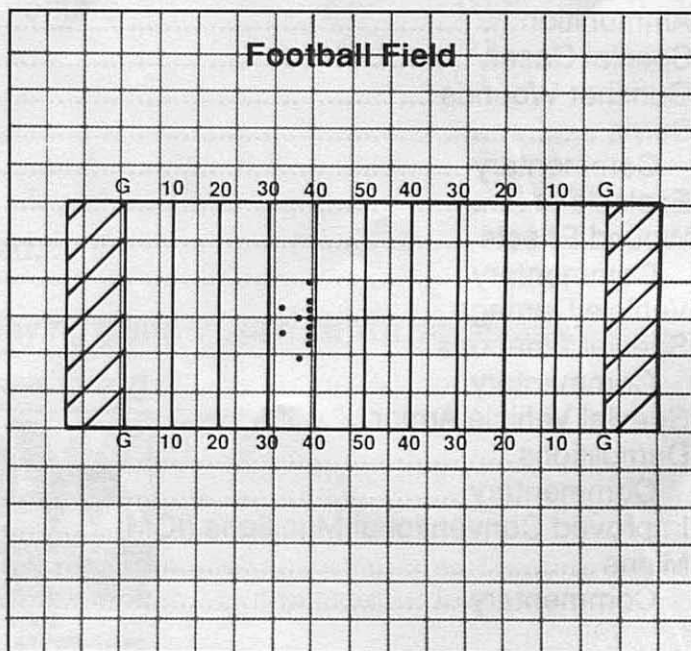
- 1 48-page rules book.
- 2 large tactical maps.
- 4 11"x17" cardstock adventure folders.
- 6 8½"x11" adventure cards.
- 2 sheets of game markers for use with the large tactical maps.

Several components in the game require some preparation prior to play. The center sheets of the rules book are separate charts intended to replace the referee charts in your current edition of **Twilight: 2000**. Carefully pry up the staples in the book, remove these sheets, and bend the staples back. In addition, the two sheets of printed markers will need to be cut out along the solid black lines prior to use.

erik schlichting (order #2175427)

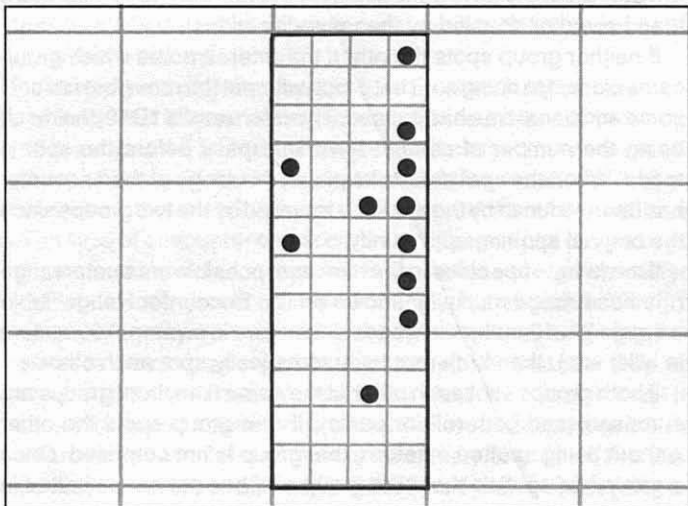
THE GRID SYSTEM

The maps included in **Twilight Encounters** are all provided with a square grid to control movement and measurement of firing ranges. Two different scales of grids are used—one for outdoor encounters and one for buildings and other interiors. The outdoor grid uses squares representing eight meters from side to side. The illustration below shows an American-style, 100-yard football field with an outdoor grid system superimposed on it.



The offensive team is lined up for a play with the ball on its own 40-yard line. This example should provide you with a good feeling for the actual area covered by one of the eight-meter grid squares. Obviously, men can easily conduct activity in such a square without interfering with each other.

Interiors generally require more detailed coverage and, in any event, cover much smaller areas. As a result, we use a two-meter grid for these. This grid can also be used for outdoor encounters which take place at close quarters, such as in an alleyway or a small clearing in the woods. The same offensive line shown on the eight-meter grid above is shown again on a two-meter grid below. Note that three large eight-meter grid squares are reproduced and broken into their component two-meter squares. In this case, each man occupies a single square. Although it is possible for more than one man to stand in a two-meter area, it is difficult for both to conduct any sort of activity without interfering with one another.



These grid sizes have been chosen to make them as easy as possible to use with the movement rates and ranges in *Twilight: 2000*. For example, when using the interior two-meter grid, a character can crawl one grid square, walk four, trot eight, and run 15 squares per action. When using the outdoor grid, the same character could walk one, trot two, and run four squares per action. It would take him four actions worth of crawling to move one square.

It is possible to move and fire diagonally through a square as well as orthogonally (straight up and down or side to side), but the diagonal distance is greater. Count a square as being 50 percent longer diagonally than orthogonally (that is, it counts as three meters of range or movement to cross a two-meter square diagonally, and 12 meters of movement or range to cross an eight-meter square diagonally).

SECOND EDITION COMBAT RULES

In the six years since the original publication of *Twilight: 2000*, we have received a massive volume of comments and feedback on various parts of the game. Not surprisingly, considering the nature of *Twilight*, much of this has concentrated on the combat system.

As a result, we have undertaken to produce a complete revision to the combat system. The rules and charts contained in this package include that revision, as well as providing updated statistics for all weapons and vehicles in the basic game. Additional ratings for vehicles and weapons provided in other products will be forthcoming soon.

In outlining what has been changed, it might be easier to delineate what remains unchanged at this time. The following rule sections are still in force from the original edition *Twilight Play Manual* and *Referee's Manual*:

- Melee Combat.
- Body Combat.
- Thrown Weapons.
- Recovery (and Post-Battle Damage).
- Animals in Combat.
- Bail-Out (but uses new panic roll rules).
- Charges (but uses new panic roll rules).
- Movement.
- Chemical Rounds.
- Indirect Fire.

In revising combat we have deliberately refrained from tampering with the character generation rules or the mix of vehicles and equipment provided in the basic game. Those, along with a number of other important additions to the system, will wait until the complete *Twilight: 2000* second edition.

USING THIS PRODUCT

Twilight Encounters is designed to put a number of pre-generated adventures in your hands for immediate use, as well as provide you with greatly increased means to resolve all the encounters in the game.

Encounter Cards: Ten pre-generated adventure encounters are provided in the game, including four folios and six adventure cards. Each of them contains the following information:

Background: This section provides you with ways to get your player characters into the encounter. Since different campaigns are set in different locales, we have tried to make the lead-in to the encounter as adaptable as possible. You should not feel bound by these backgrounds, however, and if a lead-in better suited to your own campaign occurs to you, use that instead.

Approach: How do the characters arrive in the area of the encounter? What do they see when they get there? What obstacles or hazards do they have to overcome. These are questions you need to know the answers to in order to referee the adventure, and we've tried to anticipate these questions in this section.

The Map: A color map of the encounter area is provided. Actual playing areas have either the eight-meter tactical grid or the two-meter interior grid superimposed. Some maps have portions in each scale, while some also have illustrative material to help you understand the layout of the buildings and terrain.

Map Description: This is an elaborate map key, with an area-by-area description of what the referee and players need to know about the encounter area. This may include room contents, building descriptions, or NPC locations, for example. The map key constitutes the bulk of the text, in most cases.

NPCs: This last section describes the NPC allies and adversaries the players will have to interact with to succeed. This also covers their weapons, skills, attitudes, and likely actions during the encounter.

Random Encounters: The expanded encounter system included in the rules booklet should greatly increase the depth and diversity of random encounters in the game. The revised combat rules, in conjunction with the new large tactical maps and playing markers, will make resolution of the combat part of encounters easier as well. Most encounters can be resolved on one tactical map, but they are designed so that they can be mated in several different combinations for a really large playing surface.

ENCOUNTERS

Much of the excitement players experience as they travel across the landscape of **Twilight: 2000** is due to the thrill of the unknown. That feeling of anticipation mixed with dread is heightened by a good mix of encounters. The encounters in a game have to be carefully balanced. If nothing but random encounters are generated from tables, the countryside will eventually take on a rather repetitive, mathematical feel. On the other hand, requiring the referee to make up every encounter will soon overtax his imagination. What we have tried to do with this encounter system is to chart a middle course. We provide a considerable number of tables that cover a wide variety of environments and situations. They are intended to be complete as presented and thus require no additional input on the part of the referee. However, the referee is strongly encouraged to use these tables as a starting point, not a finished product. Encounter descriptions follow below. Encounter charts begin on page 20.

RANDOM ENCOUNTERS

As the characters travel, they will encounter a variety of people, animals, settlements, and other features of the land. While many of these encounters will be mandated by the referee (pursuers overtaking the adventurers, a partisan band the referee wishes them to meet, a town or city printed on the map which they travel to), many others will be random encounters. A random encounter is one generated using die rolls and the encounter tables presented with the game.

Frequency of Encounters: The referee should roll once on the encounter table for every four-hour period in which the characters travel and once for every day in which they do not. If the group is not moving but breaks up into hunting parties, foraging parties, scrounging parties, etc., the referee rolls once per period per party for an encounter. In addition, he will roll once per day for an encounter at the party's camp.

Territory: Encounters may take place in a variety of territories. These are discussed on page 8. The referee may either roll for the territory type or may have already determined it prior to the adventure session. Some territories have a die roll modifier which is added to or subtracted from the roll on the encounter table.

Types of Encounters: The Encounter Table (page 20) lists a variety of environments (road, wood, swamp, etc.), each of which has a variety of outcomes based on the 1D6 roll. Note that some territories provide a modification to the encounter roll which changes the frequency and type of encounters. These outcomes are groups, animals, items, and no encounter. If no encounter is rolled, there is no encounter this period. If any other result is rolled, roll again on the appropriate table.

Group and item encounters each have a separate table (page 20) showing the various territories across the top and specific encounters down the side. Find the column corresponding to the territory in which the players are travelling, roll 1D10, and locate the row of the number rolled. By tracing the row to the left side of the chart you can determine the exact encounter type.

Animal encounters have a separate chart (page 21) which has the terrain along the top and the result of 1D6 roll on the left. Roll the die and read the result from the table.

Range of Encounter: The range of the encounter describes the distance between the players and what they have encountered when they first become aware of it. The range depends on the type of terrain in which it takes place. The referee rolls 1D10 and

consults the Encounter Range Table (page 21). The die roll is multiplied by the value listed on the table to determine the range, in meters, at which one or both groups may see the other. The die roll, in general, is an easy way to determine how open the terrain is in that particular area. For example, if the referee rolled a 5 on an open terrain encounter, this is an encounter range of 1500 meters—the local terrain was such that the first opportunity for the two groups to see each other occurs at a distance of 1500 meters.

Spotting and Surprise: When a group of characters encounters a group of NPCs, each group has a chance of spotting the other (AVG:RCN). Spotting a group moving in vehicles is EST:RCN. Spotting a stationary and camouflaged group is DIF:RCN. The roll is made only once per group, using the highest RCN in the group. The skill level used is reduced by one for each character in the group and by five for each vehicle in the group. It is increased by a like amount for numbers of characters and vehicles in the group encountered. However, the RCN skill used may never be more than halved or doubled by these modifications.

If neither group spots the other, the referee notes which group came closest to doing so. That group will spot the other, but not until some additional time has passed. The referee rolls 1D10, the result being the number of combat turns that pass before the spot is made. When the spot does take place, the range of the encounter has been reduced by the distance travelled by the two groups since the original spotting opportunity.

If the two groups close to the minimum possible encounter range (the base range multiplier shown on the Encounter Range Table on page 21: 10 meters in woods, 30 meters in swamp, 100 meters in hills, etc.), then both groups automatically spot each other.

If both groups spot each other at the same time, both groups are surprised (and both roll for panic). If one group spots the other without being spotted in return, that group is not surprised. Once a group has spotted the other group and has not been spotted in return, it may either wait (allowing the other group to approach closer), attempt to evade (move away from the spotted group), or attack.

If the group attacks, the other group is surprised. This counts as an ambush (see the combat rules on page 32).

If the group waits, the other group continues to have one opportunity per combat round to spot. If it succeeds before being attacked, it is not surprised.

If the group attempts to evade, the other group has one opportunity to spot each combat turn until the referee decides the group has moved far enough away from the other group to be safe. This distance will vary, but will usually involve moving beyond the original encounter range rolled. Thus, if an encounter range is 1500 meters, once a group moves to a safe distance of greater than 1500 meters without having been detected it has successfully evaded contact.

EXPANDED ENCOUNTERS

How does the referee expand upon these tables? The three main ways are altered encounters, mandated encounters, and unusual encounters.

Altered Encounters: Altered encounters are modifications of those shown on the table. Perhaps the characters let slip that they were carrying a large and valuable cargo of antibiotics at the last village, so when they encounter a band of marauders, the marauders are actively looking for them and perhaps have laid an ambush. Or maybe the local warlord is out on a hunting expedition. You might roll encounters normally, but if hunters were encountered, they

would include the warlord, would be better armed than most hunting parties, and might have a few soldiers along as guards.

The frequency of encounters may need to be altered in some situations. Suppose the characters are fleeing through the woods, pursued by dozens of search parties. One roll every four *minutes* might be more appropriate than every four hours.

Altered encounters have several very genuine advantages. First, they are extremely easy to come up with, and that's a virtue that cannot be overemphasized. If you are like most role-playing game referees you have a limited amount of time and energy to spend getting ready for a session. That means every easy encounter you come up with will give you that much more time to spend on making the rest of the adventure even more interesting.

A second advantage of altered encounters is that they can take the routine out of routine encounters. For example, a Polish Army patrol may appear to be just like every other patrol of the Polish Army you've run into. Or is it actually down to just one magazine per man? Or is it a German commando unit in Polish uniforms? Or an elite Polish unit armed to the teeth?

Ideally, your players should never be absolutely certain.

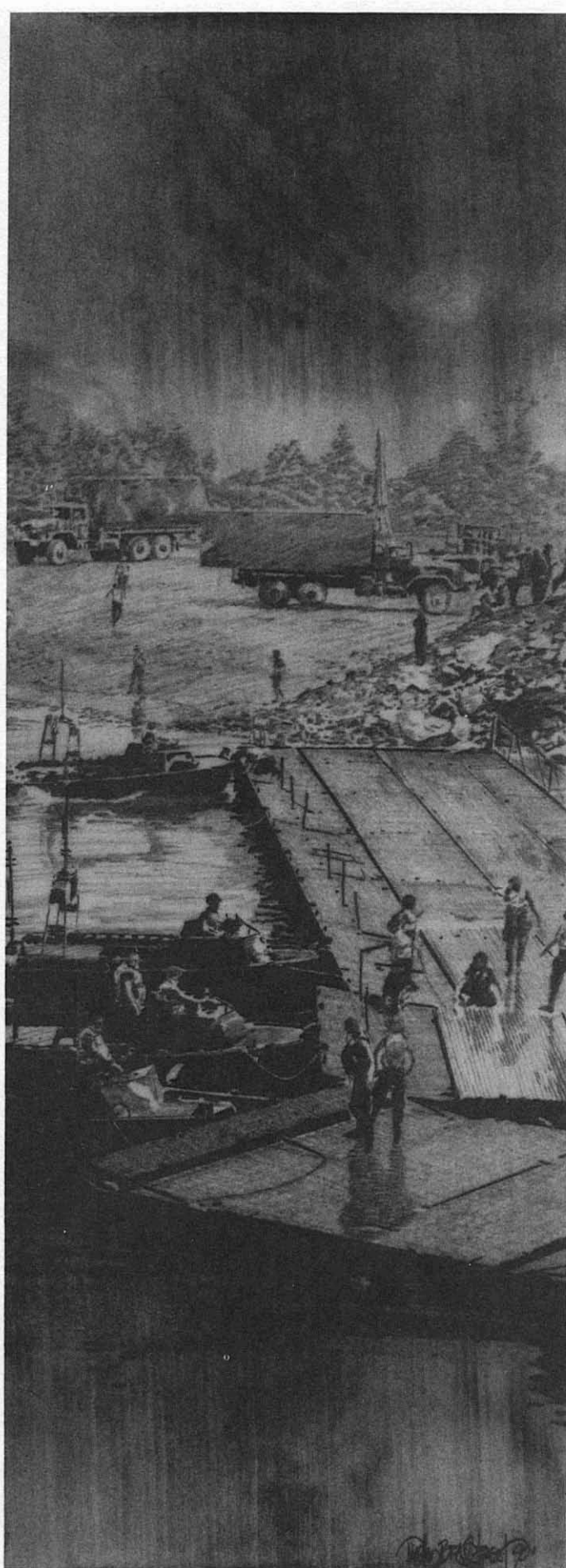
Mandated Encounters: Mandated encounters are taken right off the encounter tables, although sometimes you may want to alter them a bit as well. However, instead of rolling (or after rolling) you announce the encounter you prefer regardless of the roll result. This type of encounter can occur as a deliberate plot device by you or, more commonly, in response to the actions of your characters.

Plot devices should be used sparingly, but should definitely be used. Your players want danger and adventure, so giving them some is certainly acceptable. Just remember that that they also want to chart their own course. If you want them to check out the beautiful ruined village you've spent all week preparing, provide them with a rumor of a convoy of machinery or gold left there and never recovered, or of friendly POWs held there. That's your job. But if they decide to go marauder bashing instead, do not have them jumped in an alley, tied up, thrown in the back of a truck, and then dumped in the village!

The actions of your players should often cause you to mandate encounters. Did they shoot their mouths off in Krakow about having pulled a pile of code books off of a Russian general? Time for the Spetsnaz to show up. If they are going out on a river to look for pirates, don't stall the adventure for an hour just because you don't seem to be able to roll a 6 (or whatever) on the correct table. This is the very heart of roleplaying. It teaches the players that wisdom is rewarded with success and foolishness with setback. But most importantly, it teaches them that their actions in the game world produce appropriate reactions. That, above all else, will make the world real for them.

Unusual Encounters: Unusual encounters will probably happen every adventure session, and you won't have to spend much time figuring them out. Are they looking for the lost CIA station chief for Lublin? That's odd—there's no "wandering CIA spook" on the encounter tables. Are they searching for the sunken hulk of a river barge carrying a load of ICM shells to Soviet troops in western Poland? Hmm. No sunken boat with artillery shells, either.

The type of unusual encounters needed are usually obvious, and all you will have to do is determine whether you will mandate the encounter or make it semirandom. Looking for the station chief, for example, would probably be treated as a task using RCN skill, while the sunken barge might be specifically placed by you in a map hex, and the players would have to enter the hex by river and somehow search the river bottom to find it.





TERRITORY TYPES

The type of territory through which the players are travelling shapes the nature of the encounters they experience. The world has been dramatically changed by the Twilight War, and this is reflected by varied types of territories available.

A table is provided for the referee to use to randomly generate territories (page 20). However, he should feel free to actually assign territories in his game to shape the campaign along lines of his own design. In particular, disputed territories and cantonment territories should be assigned at the beginning of the game, based on the actual position of military units and location of active battle zones as described in the game background. However, as your campaign progresses, you may wish to begin adding one and later two to the die roll, thus making conflicts and military cantonments more frequent.

One thing to remember, however, is that there are no well marked boundaries around the various territories described here. When players move into a different territory, they should become aware of it gradually by the nature of encounters they experience, not because the referee says, "You are now moving into devastated territory."

The various types of territories are described below.

Organized: The region is nominally controlled by the prewar government, a postwar replacement faction, or forces claiming to represent one or the other. There is a regular system of commerce, defense, public welfare, and taxation of a sort, although only taxation seems to be up and running on a reliable basis. Each settlement has one or more appointed officials of the government and a detachment of armed government troops which it is responsible for feeding and supporting.

There are regular patrols on the roads, and both trade and travel are regulated by the need for travel permits and various licenses—but if you have these the roads are reasonably safe. Life may or may not be good for the inhabitants, depending on the intentions and talents of the government. In most cases, life is tolerable, but only barely.

Independent: The settlements in the region are not controlled by any one faction or group, but are independent and attempting to recover. Trade and commerce are beginning again, and many settlements regularly cooperate in rebuilding by exchanging material and expertise. The welfare of the inhabitants of the settlements is largely dependent on their local government.

Insular: The settlements in the region have been raided several times by various factions and stripped of most things of value. The survivors are extremely suspicious of strangers. They are defensive, hostile, and disinclined to let travellers in. Some trade takes place, but only by well armed merchant convoys lead by men who are well known in the region. Gaining the trust of a merchant is one of the few ways to gain entry into many of the settlements.

Terrorized: The territory is overrun by armed bands of deserters and marauders who are wantonly attacking farmsteads and villages, taking whatever they want and often putting the torch to the rest. Settlements which are still intact are badly frightened, suspicious of strangers, and defensive.

Anarchy: Most settlements in the territory have already been looted and ruined. Very few people remain outside the larger fortified towns, and no form of organized rule exists in the countryside. Marauder gangs and individual families are the most common social units. Trade does not exist within the territory, and travel is very hazardous.

Devastated: The countryside is stripped. There are no intact

farms or settlements left, and very few people or even animals. Evidence of destruction and unrepaired damage is everywhere.

Disputed: This territory is an active battle zone. Major military forces (by the reduced standards of the day) are actively contesting the ownership of the towns and villages in the area. The nationality of these forces is up to the referee, but neither side is likely to be particularly friendly to the players. They could consist of a large coalition of marauder bands fighting a Polish Army unit, or a local warlord fighting a Soviet force passing through. The area is extremely dangerous for travel and is crowded with large, well armed bodies of hostile troops. There is also considerable destruction and disruption of the local population, and the best chance for passage through is to take advantage of the confusion, of which there is a great deal.

Cantonment: A large military unit has its cantonment in the area, and has garrisons in most outlying towns and villages. The whole region is under martial law, and even small settlements serve as quarters for bodies of troops. As the troops requisition whatever they need, most civilians are overworked and very poor. Those who have found employment working for the troops, however, are often quite well off, and the army patrols the road well enough that marauders are seldom a problem.

GROUP ENCOUNTERS

A *group encounter* is a shorthand notation for an encounter with a group of human NPCs. They are called group encounters to differentiate them from animal and item encounters, even though in some cases it is possible for the "group" to be a single NPC.

The Group Encounter Table (page 20) specifies the exact type of group encountered. The Group Encounter Statistics Table (page 20) then provides a more detailed look at the makeup of the group. A few additional die rolls on the table will flesh out the group's statistics. Columns on the Group Encounter Statistics Table are described below.

Number: This column indicates the number of characters in the encounter. Usually you will have to roll a die and either multiply it by a number or add it to a number. If you multiply it by a number, the number listed is the number of men in a subunit, and the die roll is the number of subunits present.

RCN: This column gives the recon value for the group. Not every character in the group will be this good; instead, it represents the best recon available or the recon skill of the point man.

Type: This indicates the NPC type of the unit, either V (Veteran), X (Experienced), or N (Novice). Usually two values are presented, and the referee is free to choose between them or roll a die to make a choice. For ease of play, it is recommended that most characters in a unit be of the same type, although this is not strictly necessary. It is a good idea, however, to have one character (usually the leader) in each group rated one experience level higher. If more than one subgroup is present, each should be made up of troops of the same type. But different subunits can be of different types, and, again, each subunit may have a leader one level better.

Weapons: These are listed merely as military, civilian, or poor. *Military weapons* include submachineguns, assault rifles, and battle rifles. Every group or subunit will probably have an automatic rifle as well. The men are likely to have one or two grenades each.

Civilian weapons include sporting rifles and shotguns (but not the HK CAW). There may be a single submachinegun in the group or the occasional military weapon, but these are rare. Ammunition will not be as plentiful in a military unit, and the unit will have few or no grenades.

Poor weapons include few, if any, firearms, and these consist of perhaps a sporting rifle, or a pistol or two, with only a few cartridges. The group may have a few bows and knives, with the rest armed, if at all, with clubs.

HvyWpn: This column indicates the number or numbers that must be rolled on 1D6 for the group to have a heavy weapon. If one is present, roll again and consult the HvyWpn column of the Encounter Equipment Table (page 20). This will indicate the general type of weapon present (such as machinegun or antitank missile), and the referee should select one of these from the equipment list.

Some listings in the HvyWpn column include the notation *each*. This means that the referee should roll separately for each subunit. Large military units have the notation *Yes, each*, meaning that each subunit always has a heavy weapon.

Transport: This column indicates the form of transport, if any, that the group has.

Roll 1D6 and compare the number rolled to the listing in this column. If it corresponds to a number shown, that type of transport is present. If not, the group is on foot.

This die roll is made only once for the entire group, with the exception of large military units. In that case, it is made separately for each subunit. The types of transport listed are horses, vehicles, wagons, armored vehicles, and artillery.

If horses are rolled, the entire group (or subunit if part of a large military unit) is mounted on horses, and one or two pack horses will probably be present as well.

If vehicles are rolled, roll again on the Encounter Equipment Table (page 20) and consult the Motor Vehicles column. Make one roll for each subunit present, each roll producing one vehicle of the type listed.

If armored vehicles are rolled, roll again on the Encounter Equipment Table and consult the Armored Vehicles column. Make two rolls for each subunit so equipped, each roll producing one vehicle of the type listed.

If the number of men in the group or subunit is in excess of the vehicle crew, the excess are infantry riding in the passenger compartment or on the top of the vehicle.



Group Encounter Descriptions

See the Group Encounter Table on page 20. The table's columns are described in more detail below.

Marauders: Marauders are the scourge of Europe. These are groups of bandits, deserters, and criminals who live by plunder. For them, murder and pillage have become a way of life. Often made up of psychologically unstable men whom the war has pushed over the brink, marauders will be almost universally hostile to other bands, such as the player characters.

Marauders regularly attack both military and merchant convoys, and any parties travelling alone are fair game as well. Larger bands of marauders have actually taken over small villages, while others exact "tribute" from isolated farms and settlements in return for not looting them right away. In some circumstances, a marauder band may be friendly (wanting to trade, acquire information, gain recruits, or form a temporary alliance), but marauders are notorious for their betrayals.

Typical marauder bands average about a dozen men, but can be several times that size. Although most marauders are quite experienced, their lack of discipline reduces their effectiveness as a military unit (which accounts for their relatively low type rating). Marauders are well equipped with small arms, but seldom have much in the way of heavier weapons, as they prefer to travel light and avoid fights with better equipped units.

Patrol: This is a patrol of an organized and at least partially disciplined armed force. Its nature will depend largely on the territory in which it is encountered. In a cantonment area or a controlled area, it will certainly be from the controlling army or government. In a disputed territory, it will be from one of the two combatants. In the other territories, it could be from any number of organizations, and could even be there because it is lost.

The patrol will probably be searching for stragglers or marauders, be on a routine sweep of the area, or be under orders to march to a particular location for one reason or another. Under most circumstances it will be hostile to the characters and will attempt to attack or capture them.

Patrols are almost always made up of a dozen men or less. They are well equipped with small arms, often have heavier weapons, and occasionally have a few armored vehicles.

Mil. Convoy: Each subunit of a military convoy includes a wagon or motor vehicle carrying cargo, plus a half-dozen men consisting of guards and drivers. When the convoy is created, the referee should roll once per subunit on the Military Cargo column of the Encounter Equipment Table (page 20) to determine the wagon or vehicle's cargo.

If medical is rolled for cargo, the truck or wagon carrying it has, in addition to medical supplies, one doctor (MED 80), one nurse (MED 50), two medics (MED 30), and two soldiers. The medics and soldiers are armed with assault rifles, while the doctor and nurse are armed with pistols.

Merchant Convoy: Each subunit of a merchant group includes a wagon or motor vehicle laden with trade goods. The four men are drivers and guards. The referee should determine the cargo by rolling on the Encounter Equipment Table (page 20), and may do so once per subunit or once for the whole group, at his discretion.

Players who think of merchants as fat and soft, easy targets for robbery or extortion, should give the matter further thought. Only a very special sort of man can travel the lawless roads between towns and villages, braving marauder bands and hostile military units. While merchants would rather avoid a fight if at all possible, they are prepared to defend themselves.

Refugees: Displaced persons, homeless wanderers, or victims of some man-made disaster, refugees will be hungry, tired, and forlorn. They are poorly armed and unused to combat, so they pose no real threat to a group. They are a potential source of information.

Refugee encounters are also a possible adventure idea. They may attempt to enlist the aid of the PCs in righting some wrong, avenging an outrage, or regaining their homes and possessions. In any case, PCs will soon learn that refugees are a sure sign that danger is near.

Slavers: With machinery all but gone or idled by lack of power, human labor has become the principal means of tilling fields and rebuilding shattered cities.

Slavery has appeared in parts of Europe for the first time in centuries and is especially in demand in some warlord-controlled cities to clear rubble and cultivate fields. Bands of slavers comb the countryside looking for potential captives. Usually they find unarmed civilians alone and kidnap them, but they also occasionally attack small hunting parties or even farmsteads (and carry off entire families).

When slavers are found, they will have up to 40 slaves with them, at the referee's discretion. Slavers will usually give a well armed party a wide berth, but might consider trying to capture it if the opportunity presents itself. They are well armed, and tend to be disciplined and experienced, which makes them a dangerous enemy.

Hunters: This is a small band of local civilians out hunting for meat for their families. They are armed with rifles and shotguns, but do not have much ammunition, certainly not enough for a prolonged firefight. If attacked, they will put up as stiff a fight as they can, but they would rather avoid trouble and certainly will not pick a fight with a well armed group.

Hunters may be a good source of information if they are willing to talk, but usually they would rather be left alone. If their confidence can be gained, they will invite the group to visit their farm or community, which might otherwise refuse the players entrance.

Primitives: A great many people have become mentally unbalanced by the trauma of the war, and the few who survive have reverted to a primitive existence of foraging, scavenging, and theft. Primitives are not useful sources of information, as communication with them is difficult, and they cannot be relied upon to completely understand their surroundings, let alone accurately report on them.

Primitives are extremely reclusive, living in small bands in forests, caves, and ruins. They are poorly armed, and their principal defense is stealth combined with the fact that they generally have nothing worth stealing. They are not a significant threat, but often attempt to steal supplies or equipment from encampments at night. They may attack if they have the advantages of numbers and surprise.

Smugglers: Wherever there is government, no matter how tattered or threadbare, some commodity is either illegal or rigidly controlled. And then there are smugglers.

Smuggler is a broad label for extra-legal merchants. They may deal in armaments, drinking alcohol, forged travel papers, radios, drugs, anything which the government prohibits its citizens from owning.

Smugglers move their goods by wagon, vehicle, or pack horses; they are never found on foot. They are lightly armed and not particularly experienced at fighting. They will never start a fight and, if they are convinced the players are not thieves or government soldiers, may offer to travel with them for mutual security. Although

they may be unsavory, smugglers are excellent sources of information.

Large Unit: This is a large military unit with up to 100 men. It is extremely well equipped, with a number of heavy weapons, and may include armored vehicles and artillery. The unit will probably be hostile toward the PCs, but capturing stragglers is not the unit's primary mission. If the PCs are captured, it is possible that they may buy their freedom by assisting the unit in some way, either with intelligence about the enemy or the benefit of the PCs' knowledge of local geography and conditions. In this case, much will depend on the NPC motivation of the unit commander.

Stragglers: This is a small party of soldiers who have become separated from their unit. They will claim that this was accidental or deliberate, depending on their own nationality and that of the PCs (that is, NATO soldiers will claim it was accidental; Warsaw Pact soldiers will claim to be deserters).

The stragglers have no heavy weapons or vehicles, and will probably be on foot. They will be short of ammunition and in no condition to put up a prolonged fight. They will not attack unless they feel that their numbers and surprise will give them a significant edge over the PCs. The referee should remember that a large group of stragglers will probably be indistinguishable from the lead element of a patrol at first.

ELITE GROUPS

Several groups of elite troops are encountered so seldom that it would be unreasonable to put them on the encounter charts. Referees, however, should occasionally consider inserting these.

For the United States, Special Forces teams operate behind enemy lines.

The Soviets have roving Spetsnaz teams on special missions as well. And scattered remnants of the Polish 6th Pomeranian Air Assault Division and the Czech 1st Air Assault Brigade, and of course the British SAS, may occasionally be encountered.

The situation being as confused as it is, it should never be a foregone conclusion that the players will necessarily be aligned with, or opposed to, any one of these groups. The one thing that these groups will have in common is that they will resemble a small patrol in configuration and be made up exclusively of well armed, Elite NPCs.

ANIMAL ENCOUNTERS

If the group encounters animals, the referee only rolls to see if the group spots the animals. This task is AVG: RCN. The skill level of the player with the highest recon skill is used, but five is subtracted from the skill for every extra person with him. If spotting is successful, the group surprises the animals; if it is unsuccessful, the animals surprise the group.

If the player characters are in camp or near vehicles, then they will never surprise animals, and all animal encounters should become no encounter. (The referee may occasionally throw in a comment such as "while your vehicles were moving through the woods, you flushed a flock of birds, but they were too far away to get a shot at.")

Most animals, if they surprise the group, will flee, and the group will not have an opportunity to attack. Some animals have a chance of attacking, as listed on the Animal Data Chart (page 21). If these animals surprise the group, the referee rolls to determine whether they will attack or not. If so, a combat follows; if not, the animals will flee, and there will be no encounter (although the players may hear them crashing away through the trees).





ITEM ENCOUNTERS

The term *item* covers a variety of fixed or semifixed features of the landscape. They are rolled for in the same manner as are group encounters. The Item Information Table (page 20) provides additional data in four areas: people, type, weapons, and goods. Table columns are described below.

People: This column indicates the number of people present. In the case of a roadblock or camp, it refers the referee to the appropriate group manning the roadblock or camp.

Type: Type indicates the NPC quality type present. Again, two values are generally given, and the referee should choose between them for the specific encounter generated.

Wpns: This column shows the sort of arms used by the people present. They are either civilian or military, and have the same meaning as in the Group Encounters section (see page 9).

Goods: This column indicates the type of specific material the PCs may find present. If numbers precede the material, one of these numbers must be rolled on 1D6 for the material to be present.

Item Encounter Descriptions

The specific items on the Item Encounter Table (page 20) are described in detail below.

Village: This is a fortified village of 50 to 500 inhabitants. Its inhabitants are armed, although not usually very well. If actually attacked, the citizens would be able to defend themselves only with some difficulty. Villages are described in greater detail in the separate settlement rule on page 14.

Ruined Village: Although Europe is studded with ruins of one sort or another, this village was destroyed fairly recently. Some of the timber may still be smoldering. Although the village has been thoroughly looted, caches of food or merchant goods will remain which the looters either did not discover or couldn't carry off.

No permanent inhabitants live in a ruined village, but the referee is encouraged to add a group encounter to at least some of the

ruined villages. This could be a group of refugees seeking shelter (perhaps the original inhabitants), a band of primitives scavenging in the ruins, a patrol making camp, a group of slavers with prisoners, or even the marauders responsible for the destruction.

Farm: This is a small fortified farmstead inhabited by one or two families and perhaps a few hired men. They are armed with an assortment of civilian weapons and are prepared to defend themselves against attack, although they are mostly not experienced fighters. The farm is well stocked with food, and, if the PCs can gain the farmers' trust, the farmers will trade with the PCs and serve as a good source of information.

Ruined Farm: Similar to the above, but recently attacked and burned out. The PCs may find some small stores of food in the ruins.

Roadblock/Camp: In organized, disputed, and cantonment territory, this is a military roadblock and traffic control point. It is manned by a regular army patrol generated from the Group Encounter Table (page 20) but never equipped with armored vehicles. In independent or terrorized territory, this is a marauder encampment inhabited by two marauder bands, both generated from the Group Encounter Table. In neither case will the roadblock or camp include anything valuable aside from the weapons and ammunition of the groups manning it.

Supply Dump: This is a small military installation with 50 to 100 tons of military cargo stored and guarded by the soldiers manning the installation. Roll on the Military Cargo column of the Encounter Equipment Table (page 20) to determine the nature of the cargo, but reroll any medical or parts results. The troops guarding the dump are not front-line combat troops and are not as formidable opponents as a regular unit. However, if a supply dump is present, other regular units are certainly nearby in a position to come to the dump's assistance.

Abandoned Supply Dump: This is a recently abandoned supply facility as described above. There is a one-third chance that a few supplies have been left behind. If so, roll on the Encounter

Equipment Table (page 20) to determine their nature.

Repair Yard: This is the encampment of an ordnance repair unit, complete with several large trucks, a mobile machine shop, a large supply of spare parts, and 1D6 disabled vehicles currently under repair. About half of the unit members are qualified mechanics. All of the men are armed, but the mechanics generally do not have their weapons with them while working.

Abandoned Repair Yard: This is a recently abandoned version of the above facility. It has at least one derelict vehicle remaining and a two-thirds chance of there being a small number of useable parts left behind.

Field Hospital: This is an active field hospital treating a large number of wounded soldiers. The personnel present include two doctors (MED 80) and four nurses (MED 50). The rest of the personnel are divided between medics (MED 30) and nonmedical personnel.

Several light vehicles will be present, either horse-drawn wagons or ambulance versions of the three-quarter-ton truck, as well as medical supplies. The nonmedical personnel are armed with assault rifles, but the medical personnel do not generally carry weapons while working.

Abandoned Field Hospital: This is a recently abandoned facility as described above. It has a 50-percent chance that a small quantity of medical supplies was left behind.

Crater: The group will automatically spot a crater at the encounter range; no die roll is necessary. The encounter range is the distance from the edge of the apparent crater to the group.

Derelict Vehicle: If a derelict vehicle is encountered, the encounter range is the distance at which the group automatically spots the vehicle. It is unoccupied. When characters encounter a vehicle, the referee must decide what type of vehicle it is. He decides if it is an armored vehicle or motor vehicle and rolls on the appropriate column of the Encounter Equipment Table (page 20) to determine the general type. He then picks any vehicle from the equipment list which fits this type.

To determine the condition of the vehicle, roll 1D6 for the number of damaged components. Decide which specific components are damaged, or roll on the appropriate Damage Table (page 26). Roll 1D10 times 10 for each damaged component, the result being the percentage of damage to the component. If the ammunition or fuel were hit, it is assumed that they did not explode; there are plenty of burnt out wrecks in Europe, and finding one of them does not constitute a meaningful encounter.

Next determine the wear value of the vehicle by rolling 1D10. This will be important should the players decide to repair the vehicle themselves. Finally, the vehicle will have already been stripped of its most important nondamaged components—specifically, any machineguns, radios, range finders, missile launchers, fuel, and surviving ammunition will probably have been taken from the vehicle.

In very rare cases, the vehicle will not have been stripped. This will never be the case on a road or in open terrain, but there is a 10-percent chance in hill terrain and a 20-percent chance in woods and swamp that the vehicle has been abandoned and never stripped.

Derelict Convoy: This consists of 1D6 derelict motor vehicles, all damaged and stripped, apparently the victims of an ambush. There is a one-third chance of military and a one-third chance of mercantile goods being present in small quantities. If so, roll on the appropriate column of the Encounter Equipment Table (page 20) to determine the exact type.



SETTLEMENTS

The four sizes of settlements in the game are villages, towns, cities, and major cities. Of these, only towns, cities, and major cities are shown on the map. Villages are found due to a village result on the encounter table. Players and referees should make a note of the locations of villages encountered for future reference.

Settlements usually have three to four times the number of buildings as are required to house the inhabitants, and the excess vacant buildings are in very poor repair. Many have fallen down, especially any of wood construction, and most of the rest are infested with rats or other small animals. The inhabitants will usually live in one part of the settlement, although cities and major cities will have subdivided into several smaller communities separated by belts of rubble and abandoned buildings. These smaller communities may or may not share a common municipal government.

In the cities and major cities, urban life tends to be brutal and unpleasant. While some merchants and small factory owners are very wealthy—living in comparative luxury surrounded by hired guards and servants—starvation, crime, and disease are often rampant, particularly in cities without cohesive municipal governments. Only the very brave and well armed venture out on the streets at night.

While most cities pay lip-service to loyalty to the central government, for the most part there is no central government. When army units pass through, the cities usually cooperate grudgingly, although communities are increasingly fighting back against forced requisition of supplies, setting up autonomous areas, and looking to their own protection.

Charts and tables (page 21) allow the referee to generate a variety of information about settlements. This information includes population, defenses, attitude, government, and crisis.

Population and Defenses: The Settlement Size Table (page 21) is used to determine the population and defenses of a settlement. Roll 1D10 and check the column for the appropriate settlement type to determine the total population. The armed population of the settlement is a percentage of the total, as listed at the bottom of the table.

In cities and major cities, the armed contingent is usually organized along military lines—with a mix of military and civilian arms and a smattering of heavy weapons. It is usually built around the core of prewar police forces, local militias, or military units which have settled in the area.

Towns and villages are not nearly as well equipped as the larger urban militias, and their weapons are almost exclusively sporting rifles, shotguns, and even bows and pistols. Heavy weapons are virtually unknown, and ammunition shortages usually limit the utility of whatever heavy weapons may be present.

All settlement militias are a mix of Experienced and Novice troops, with only the occasional Veteran or Elite. Usually no more than 10 percent of the armed strength of the settlement is under arms and ready to repel an attack at any given time, and this would drop to five percent at night. The rest can be called to arms, given advance warning, but assembling them would take from an hour in a village to as much as several days in a major city.

Attitude: The reception that U.S. soldiers can expect to receive is varied. Some settlements will welcome them as liberators. Some will consider them fellow victims of the war and help them. Some will hate them for what the "enemy" has done to them. Some will fear that cooperation with them will bring reprisals from the Warsaw Pact armies. Some will view them as just another group of

soldiers, the color of the uniform and the spoken accent having lost all meaning. And some will fight them out of duty and patriotism.

To determine the reception the group receives, roll 1D6 and consult the Settlement Attitude Table (page 21). Note that the territory type provides a modification to the die roll. Seven results are possible.

Friendly & Curious: The inhabitants will welcome the group and offer assistance if it is in trouble. They will actively hide the group members from their enemies and provide them with food, information and medical care, and will be happy to trade goods with them.

Open to Contact: The people are not fearful of the group, and they are willing to allow the group to enter the settlement to trade, obtain information, or even stay for a while.

Neutral: While the people may allow the group into the settlement, they may require some convincing. The people are not overly friendly and will not be inclined to take any risks on behalf of the PCs.

Suspicious: The people are not willing to let the group into the settlement and do not want to have anything to do with the adventurers. Only by making friends with someone the settlement trusts, or by doing the citizens some great service, will the PCs bring down the barrier of suspicion.

Frightened: The inhabitants are terrified of the many armed bands that roam the countryside. They are likely to open fire out of fear, and will insist that the group go away and leave them alone. It will be nearly impossible to gain their trust, but if the group should somehow help the settlement through a crisis, the people will be very grateful.

Defensive: The settlement has been attacked more than once and is in no mood to risk a repetition. The guards are vigilant and unwilling to let any group of armed men enter their defenses. Although they could use the help of a party of trained and well armed soldiers, their experiences have been bad enough in the past that they are unwilling to take another chance on a group of strangers.

Hostile: The people will be actively hostile to the PCs. They will open fire on them and, if the opportunity presents itself, inform local military units of their presence. The group cannot expect any help from this settlement.

Government: If the players should gain entry and even acceptance to a settlement, the type of government will become important. To determine the government type, roll 1D6 and consult the Urban Government Type Table (page 21). Notice that die roll modifications are based on the type of territory the settlement is in. There are seven possible results.

Federated: The settlement is part of a larger governmental unit. This is usually, but not always, a government claiming the right to rule the entire nation. Practically, however, no single government rules more than a handful of settlements. A few larger regional federations exist as well. A federated government will usually have a group of appointed officials in charge who have been sent by the central ruling authority. A number of regular army soldiers are present, as well as the local militia.

Popular Council: A local civic council, usually popularly elected, handles the business of governing the settlement. While the council may be hampered by lack of resources and qualified personnel, it is doing everything in its power to help its citizens survive the war's devastation and rebuild their lives.

Corrupt Council: A local civic council holds power, either by force of arms or through rigged elections. Despite an outward display of democracy and concern for the people, the councilmen are growing

rich while the situation of the common man remains wretched. A corresponding high rate of corruption will exist throughout the municipal government. Virtually any activity will require a bribe.

Dictator: The settlement is ruled by a powerful and charismatic dictator. He has come to power through legitimate means, but has since gradually discarded the democratic structure of the municipal government and now rules directly by decree. He has absolute power, and the direction this has taken him and the settlement will be determined by the results of his NPC motivation cards.

Warlord: A strong military leader who has a very loyal group of soldiers has taken control of the settlement. Often he was the former commander of the militia, or perhaps the commander of a passing military unit. He may have come to power peacefully, as the settlement considered him the lesser of two evils. Whether his tastes now turn to self-enrichment, banditry, empire-building, or perhaps even civic improvement will depend on the results of his NPC motivation cards.

Captive: The settlement has recently been captured following a battle. It is now held by a military unit or large band of marauders, at the referee's option. In either case, this has resulted in considerable damage and loss of life, and the new conquerors are subjecting the inhabitants to brutal treatment.

Anarchy: There is no effective form of government in the settlement. Strong individuals look out for their own families; gangs have staked out their "turf"; and community groups band together to form vigilante bands to protect themselves.

Crisis: No settlement is complete without a problem. Ten typical problems are presented on the Settlement Crisis Table (page 21), but referees should feel free to improvise. If starved for a good idea, roll 1D10 and read the result from the table. All of these are self-explanatory, but will require simple elaboration on the part of the referee.

URBAN ENCOUNTERS

Once players have gained entry to a settlement, they face a whole new range of encounters. A good rule of thumb for encounters is to roll once for an encounter each time the group goes from one part of the city to another. Roll 1D6 and consult the Urban Encounter Table (page 21). Note that the table has two columns (one for daylight encounters and one for night) and a variety of die roll modifications based on government type and settlement size.

The following encounter results are possible:

Patrol: A four-man patrol of militia or vigilantes. They are Experienced and armed with a mix of military and civilian arms. This is not a particularly threatening encounter unless the players are trying to avoid the law.

Work Gang: A group of 20 or more laborers working to clear rubble or repair a structure. These will be prisoners or, in less enlightened settlements, slaves at forced labor under the watchful eye of two armed guards. In either case, they are not well off and will be alert to the opportunity to attack and overpower their guards—and perhaps start a riot. If this happens in the presence of the players, they may wish to help the guards or the prisoners, depending on the current political situation in the settlement and the PCs' inclinations.

Refugee: This is identical to the normal refugee encounter.

Scavenger: This is 1D6 people searching unoccupied buildings for salvageable material, which they exchange for food. They will be armed only with knives and clubs. They may attack, flee, or stop to chat with the PCs, depending on the general attitude toward them in the town.

Primitives: This is identical to the primitives encounter described on page 10.

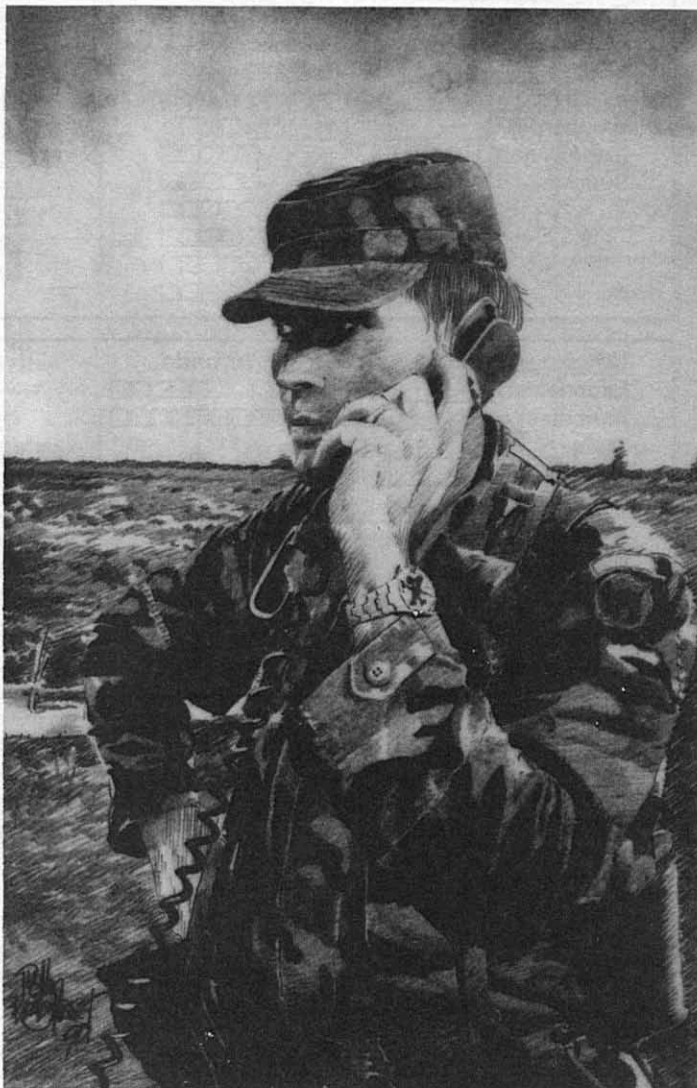
Mob: A large mob of slaves, scavengers, and refugees (as many as a hundred) pours through the street, attacking the citizens and looting whatever they can find. They will attack the players as well, and try to kill them or beat them senseless, and steal their weapons and possessions.

Gang: Certain areas of settlements are informally ruled by gangs. Some of these were originally criminal bands existing before the war, while others are bands of refugees which laid claim to a particular area as a "turf" to be scavenged. Many later moved into the "protection" racket (extorting money from businesses and residents) or run small vice operations.

Gangs come out mostly at night; only in an extremely chaotic situation will gang violence be a significant daylight problem. Gangs, when confronted, will have 3D6 gang members, half Experienced and half Novice, armed with clubs, knives, and a few pistols.

Thugs: A total of 1D6 brigands are intent on waylaying and robbing the characters. Thugs usually ambush their victims, but often create a diversion in order to separate their intended victims from their vehicles. Thugs will run away if outnumbered. They are Experienced NPCs armed with knives and clubs, and perhaps one or two firearms (pistols or shotguns).

Dogs: A pack of dogs, the same as encountered in the wild.



TRAVEL MOVEMENT TABLE

<i>Unit</i>	<i>Move</i>	<i>Fuel</i>	<i>Maint#</i>
Man	20/20	—	—
Horse	20/20	—	—
Mule	20/20	—	—
Wagon/horse	20/5	—	—
Wagon/ox	10/5	—	—
Cart/horse	20/5	—	—
Cart/ox	10/5	—	—
Bicycle	60/20	—	—
Motorcycle	190/75	16/8	2
Car	200/30	80/20	2
HMMWV	200/60	90/30	2
UAZ-469	200/40	60/20	2
3/4-ton truck	180/35	90/30	2
5-ton tanker	160/15	280/70	4
10-ton tanker	100/10	450/150	4
2.5-ton truck	180/35	196/65	4
5-ton truck	160/15	280/70	4
8-ton truck	100/10	450/150	4
LAV-25	180/70	280/70	6
LAV-75	160/95	480/120	10
BRDM-3	200/60	290/80	4
OT-65	200/60	290/80	4
M113	120/70	360/120	6
M2	140/85	650/200	8
BMP-B	120/70	440/110	12
BMP-C	130/80	520/130	12
BTR-70	160/65	290/80	6
OT-64	180/70	290/70	6
M1	140/110	2000/550	14
M1E1	130/100	2000/550	14
M1E2	140/110	2000/550	14
T-72	120/70	1360/240	18
T-80	120/70	1360/240	18
T-90	120/90	1360/240	16
M109A2	110/65	450/150	10
M988	100/60	1400/280	12
ZSU-30	90/55	250/80	12
SAU-122	120/70	550/130	10
SAU-152	100/60	500/170	10

Abbreviations: *Move:* On-road/off-road *Fuel:* Capacity/consumption *Maint#:* Maintenance number.

PULLOUT CHART BOOKLET

Carefully pry up the staples in the center of this book, remove pages 19-30, and bend the staples back into place.

Use this pullout section as a separate chart booklet—a handy reference provided for your convenience.

TERRAIN EFFECTS ON MOVEMENT CHART

<i>Unit</i>	<i>Open</i>	<i>Wood</i>	<i>Swamp</i>	<i>Hill</i>
Men	N	N	N	1/2
Animals	N	N	1/2	1/2
Vehicles	N	1/2	1/2	1/2

FOOD CONSUMPTION CHART

<i>Unit</i>	<i>Food</i>
Man	1.5 kg of MRE 2 kg of domestic 3 kg of wild
Horse	15 kg of grain and graze four hours
Mule	10 kg of grain and graze four hours
Ox	Graze four hours

ALCOHOL OUTPUT CHART

<i>Still Size</i>	<i>Input/Output</i>
Small	30 kg/5 liters
Medium	80 kg/35 liters
Large	3000 kg/2400 liters

FUEL ENERGY TABLE

<i>Fuel</i>	<i>Consumption Multiplier</i>
Gas	1
Avgas	1
Diesel	1
Ethanol	3
Methanol	4

ENCOUNTER CHARTS

RECON MODIFIERS FOR SURPRISE

Condition	Own	Enemy
Per character	-1	+1
Per vehicle	-5	+5

TERRITORIES (1D6)

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 TABLE (1D6)

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

GROUP ENCOUNTER TABLE (1D10)

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

GROUP ENCOUNTER STATISTICS TABLE

Group	Number	RCN	Type	Weapons	HvyWpn	Transport
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
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

Abbreviations: H: Horse V: Motor vehicle W: Wagons A: Armored vehicles Arty: Artillery.

ENCOUNTER EQUIPMENT TABLE

Die	Heavy Weapons	Artillery	Motor Vehicles	Armored Vehicles	Military Cargo	Merchant Cargo
1	AT missile	Rapira-3	5-ton	Tank	Ammo	Scrap Metal
2	AT rocket	Mortar	5-ton	Lt AFV	Parts	Machinery
3	Grnd Lnchr	Mortar	2.5-ton	Lt AFV	Medical	Food
4	MG	Howitzer	2.5-ton still	APC	Food	Wool
5	MG	Howitzer	3/4-ton	APC	Fuel	Clothing
6	MG	SPA	UAZ-469	IFV	Wpns	Furnishings

Abbreviations: SPA: Any self-propelled howitzer or air defense gun Tank: Any tank in the equipment lists Light AFV: Any light combat vehicle in the equipment lists APC: Any armored personnel carrier in the equipment list except those listed below under IFV IFV: Infantry fighting vehicle; M-2 or any BMP variant.

ITEM ENCOUNTER TABLE (1D10)

Group	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	—

ITEM INFORMATION TABLE

Item	People	Type	Wpns	Goods
Village	See below			
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, 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 military, 3-4 mrcht

ENCOUNTER RANGE TABLE

<u>Terrain</u>	<u>Range</u>
Open	1D10x300 meters
Hill	1D10x100 meters
Swamp	1D10x30 meters
Woods	1D10x10 meters

ANIMAL ENCOUNTERS (1D6)

<u>Die</u>	<u>Terrain</u>			
	<u>Wood</u>	<u>Swamp</u>	<u>Hill</u>	<u>Clear</u>
1	Boar	Boar	Boar	Game
2	Fowl	Fowl	Fowl	Fowl
3	Game	Game	Game	Game
4	Grazer	Grazer	Grazer	Grazer
5	Dogs	Dogs	Dogs	Dogs
6	Bear	Game	Bear	Dogs

ANIMAL DATA CHART

<u>Animal</u>	<u>Meat</u>	<u>Move</u>	<u>#App</u>	<u>Hits</u>	<u>Attack</u>	<u>Hit#</u>	<u>Dam</u>	<u>Stature</u>
Grazer	1D6x5kg	10/20/60	2D6	15	No	—	—	6
Bear	1D6x20kg	10/20/40	1	80	40%	60	4D6	27
Boar	1D6x10kg	5/10/30	1	50	80%	40	4D6	12
Dog	1D6x2kg	15/30/60	3D6	10	60%	60	2D6	3
Game	1D6x1kg	10/20/40	2D6	5	No	—	—	—
Fowl	1D6x1kg	5/20/80	4D6	5	No	—	—	—

SETTLEMENT SIZE TABLE (1D10)

<u>Die</u>	<u>Village</u>	<u>Town</u>	<u>City</u>	<u>Major City</u>
1	50	1000	10,000	30,000
2	100	1500	12,000	40,000
3	150	2000	14,000	50,000
4	200	2500	16,000	60,000
5	250	3000	18,000	70,000
6	300	3500	20,000	80,000
7	350	4000	22,000	90,000
8	400	4500	24,000	100,000
9	450	5000	26,000	110,000
10	500	5500	28,000	120,000
Armed	20%	10%	5%	5%

SETTLEMENT ATTITUDE TABLE (1D6)

<u>Die</u>	<u>Attitude</u>
1	Friendly & curious
2	Friendly & curious
3	Open to contact
4	Neutral
5	Neutral
6	Suspicious
7	Frightened
8	Defensive
9	Hostile

ATTITUDE DIE ROLL MODIFIERS

<u>Mod.</u>	<u>Territory</u>
+1	Organized, devastated
+2	Anarchy, disputed, cantonment
+3	Insular, terrorized

SETTLEMENT CRISIS (1D10)

<u>Die</u>	<u>Crisis</u>
1	Food shortage
2	Engineer needed
3	Ammunition shortage
4	Impending attack
5	Internal unrest
6	Rampant corruption
7	Citizens kidnapped
8	Mechanic needed
9	Epidemic, doctor needed
10	Disease, medicine needed

URBAN GOVERNMENT TYPE (1D6)

<u>Die</u>	<u>Type</u>
1	Federated
2	Federated
3	Popular council
4	Corrupt council
5	Popular council
6	Dictator
7	Warlord
8	Captive
9	Anarchy
10	Captive
11	Anarchy

GOVERNMENT DIE ROLL MODIFIERS

<u>Mod.</u>	<u>Territory</u>
+2	Independent
+3	Insular, disputed
+4	Terrorized
+5	Anarchy

URBAN ENCOUNTER TABLE (1D6)

<u>Die</u>	<u>Day</u>	<u>Night</u>
1	None	None
2	None	None
3	None	None
4	Patrol	None
5	Patrol	Scavenger
6	Work gang	Thugs
7	Refugee	Gang
8	Scavenger	Primitives
9	Primitives	Dogs
10	Mob	Gang
11	Gang	Dogs

URBAN ENCOUNTER DIE ROLL MODIFIERS

<u>Mod.</u>	<u>Government Type</u>
+1	Corrupt council
+2	Captive, anarchy

<u>Mod.</u>	<u>Settlement Size</u>
+1	Town
+2	City
+3	Major city

REVISED PERSONAL COMBAT CHART

BOWS

-Recoil-									
Weapon	ROF	Dam	Pen	Rld	Blk	SS	Brst	Rng	
Crossbow	SS	1	Nil	4	6	4	—	20	
Hunting bow	SS	-1	Nil	1	5	10	—	15	

AUTOMATIC PISTOLS

-Recoil-									
Weapon	ROF	Dam	Pen	Blk	Mag	SS	Brst	Rng	
9mm Par	SA	1	Nil	1	15	5	—	12	
Makarov	SA	1	Nil	1	8	7	—	10	
Tokarev	SA	1	Nil	1	8	7	—	12	
.380	SA	1	Nil	1	7	6	—	10	
.22	SA	-1	Nil	0	6	2	—	10	
.45	SA	1	Nil	1	7	5	—	12	

SHOTGUNS

-Recoil-									
Weapon	ROF	Dam	Pen	Blk	Mag	SS	Brst	Rng	
Pump	PA	5*	3-4-nil	5	5i	3	—	90	
Double barrel	SA	5*	3-4-nil	5	2i	6	—	90	
CAW	5	5*	3-4-nil	4	10	4	13	90	

*Buckshot damage is 9.

SUBMACHINEGUNS

-Recoil-									
Weapon	ROF	Dam	Pen	Blk	Mag	SS	Brst	Rng	
Sterling	5	1	Nil	2/3	34	2	4	30	
Uzi	5	1	Nil	2/3	32	2	4	30	
MP5	5	1	Nil	3	30	2	6	30	
M231	5	2	1-nil	3/4	40 ³⁰	3	9	25	
AKR	5	2	1-nil	2/3	30	3	9	30	
vz 24	5	2	1-nil	3	32	2	5	30	
Skorpion	5	1	Nil	1	20	3	7	5	
(with stock)				2		2	5	12	
G-11	3	2	1-nil	4	50	2	4	55	

ASSAULT RIFLES

-Recoil-									
Weapon	ROF	Dam	Pen	Blk	Mag	SS	Brst	Rng	
M16	3	2	1-nil	5	30	3	4	55	
IW	5	2	1-nil	4	20	3	7	50	
AKMR	5	2	1-nil	5	30	3	7	50	
AK-74	5	2	1-nil	5	30	3	7	50	

AUTOMATIC RIFLES

-Recoil-									
Weapon	ROF	Dam	Pen	Blk	Mag	SS	Brst	Rng	
M249	10	2	1-nil	5	30/200B	1	6	50	
Bipod						1	3	75	
LSW	10	2	1-nil	5	30	2	11	40	
Bipod						1	6	65	
RPK74	10	2	1-nil	5	30/40	2	12	50	
Bipod						1	6	75	

BATTLE RIFLES

-Recoil-									
Weapon	ROF	Dam	Pen	Blk	Mag	SS	Brst	Rng	
AKM	5	3	2-nil	5	30	4	9	50	
FAL	5	4	2-3-nil	5	20	4	14	65	
G3	5	4	2-3-nil	5	20	4	13	65	

SPORTING RIFLES

-Recoil-									
Weapon	ROF	Dam	Pen	Blk	Mag	SS	Brst	Rng	
30-30 LA	LA	3	2-nil	5	6i	6	—	50	
30-06 BA	BA	4	2-3-nil	5	5i	5	—	75	
.22 BA	BA	-1	Nil	4	8	3	—	50	
.22 SA	SA	-1	Nil	4	9i	3	—	50	
Mauser	BA	4	2-3-nil	5	5i	5	—	65	

REVOLVERS

-Recoil-									
Weapon	ROF	Dam	Pen	Blk	Mag	SS	Brst	Rng	
.38 Sp	DAR	1	Nil	1	6R	6	—	10	

SNIPER RIFLES

-Recoil-									
Weapon	ROF	Dam	Pen	Blk	Mag	SS	Brst	Rng	
M40	BA	4	2-3-nil	5	5i	7	—	75	
M21	SA	4	2-3-nil	6	20	4	—	65	
Bipod	SA	4	2-3-nil	6	20	2	—	75	
PSG1	SA	4	2-3-nil	6	20	6	—	70	
L42	BA	4	2-3-nil	5	10	5	—	75	
Parker-Hale	BA	4	2-3-nil	5	3i	5	—	75	
SVD	SA	4	2-3-nil	6	10	4	—	75	
vz54	BA	4	2-3-nil	5	5i	5	—	65	

Note: If a scope is fitted, add 15 meters to the basic range for aimed shots.

MACHINEGUNS

-Recoil-									
Weapon	ROF	Dam	Pen	Blk	Mag	SS	Brst	Rng	
M60	5	4	2-3-nil	6	50B	2	8	65	
Bipod						1	4	90	
Tripod						1	3	125	
MG3	10	4	2-3-nil	6	50B	2	17	65	
Bipod						1	9	90	
Tripod						1	6	125	
MAG	10	4	2-3-nil	6	50B	2	17	65	
Bipod						1	9	90	
Tripod						1	7	125	
PK	5	4	2-3-nil	6	50B	3	9	65	
Bipod						2	5	90	
Tripod						1	4	125	
Vz59	5	4	2-3-6	6	50B	2	8	65	
Bipod						1	4	90	
Tripod						1	3	120	
M214	5	4	2-3-nil	4	1000C	1	2	50	
Tripod	50					1	8	100	
M2HB	5	8	2-3-6*	8	105B	6	27	65	
Tripod						3	13	250	
DShK	5	8	2-3-6	8	50B	6	27	65	
Tripod						3	13	250	
KPV	5	12	2-3-6	10	100B	Var	Var	250	

*12.7 SLAP ammunition has a penetration value of 1-2-3.

AUTOMATIC FIRE BURST REDUCTIONS FOR RANGE

<i>Burst</i>	<i>Reduction</i>
3	-1
5	-2
10	-3

BODY ARMOR PROTECTION

<i>Type</i>	<i>AV</i>	<i>Head</i>	<i>Chest/Abd.</i>
Flak jacket	1	No	Yes
Kevlar vest	1	No	Yes
Steel helmet	1	1-3	No
Kevlar helmet	1	1-4	No

INITIATIVE TABLE

<i>Init.</i>	<i>PC NPC</i>	
	<i>Cool</i>	<i>Type</i>
6	0	—
5	1	Elite
4	2	Veteran
3	3, 4	Experienced
2	5, 6	—
1	7+	Novice

MELEE WEAPONS CHART

<i>Weapon</i>	<i>Range</i>	<i>Hit Mod.</i>	<i>Damage</i>
Bottle	S	—	1D6
Knife*	S	+10	2D6
Hatchet	S	—	1D6+1/2 STR
Club	S	-5	1D6+STR
Bayonet†	L	+5	2D6+1/2 STR
Spear	L	—	2D6+1/2 STR
Axe	L	-10	3D6+STR
Machete	L	+10	2D6
Rifle butt	S	—	1D6+STR

*Including bayonet when not on rifle.

†When on rifle.

MAN/ANIMAL HIT LOCATION CHART

<i>Die</i>	<i>Biped</i>	<i>Quadruped</i>
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 counts as a near side hit.

Prone Biped: Table assumes top shot.

Side Shot: As above.

Front Shot: Leg or abdomen hit is a miss.

Rear Shot: Head, arm, or chest is a miss.

Quadruped: Table assumes side shot.

Front Shot: Hindquarters or abdomen hit is a miss.

Rear Shot: Head or forequarters hit counts as a miss.

COMBAT MOVEMENT Animals

<i>Unit</i>	<i>Movement</i>
Bear	10/20/40
Boar	5/10/30
Dog	15/30/60
Ox	10/15
Mule	10/20
Horse	10/20/60

Man

<i>Unit</i>	<i>Movement</i>
Man	1/8/15/30

Vehicles

<i>Unit</i>	<i>Movement</i>
Motorcycle	65/30
Bicycle	20/10
Car	70/15
HMMWV	70/25
UAZ-469	70/25
2½-ton truck	60/15
5-ton truck	55/10
8-ton truck	35/10
¾-ton truck	60/20
Cart/wagon	10/5
Ox cart	5/5
5-ton tanker	55/10
10-ton tanker	35/10
M-2	50/35
M-113	40/30
BMP-B	40/30
BMP-C	45/30
BTR-70	55/25
OT-64	60/30
LAV-25	60/30
LAV-75	55/40
BRDM-3	70/25
OT-65	70/25
M1	50/40
M1E1	45/35
M1E2	50/40
T-72	40/25
T-80	40/25
T-90	40/30
M109A2	35/25
M988	35/25
SAU-122	40/30
SAU-152	35/25
ZSU-30-6	65/40



HEAVY WEAPONS FIRING CHARTS

Penetration is the listed value+2D6.

HEAT rounds halved versus Cb, reactive armor.

HAND GRENADES

Type	Damage	Pen
Frag	C:3, B:12	Nil
Antitank	C:3, B:4	18C
Concussion	C:5	Nil
Thermite	C:1, B:4	Nil
Chemical	C:1, B:12	Nil
WP	C:1, B:12	Nil

RIFLE GRENADES

Type	Rng	IFR	Damage	Pen
RAW HE	100	2000	C:10, B:28	1C
RAW HEAT	100	2000	C:8, B:20	75C
HEAT	15	200	C:7, B:12	30C
WP	25	200	C:1, B:12	Nil

GRENADE LAUNCHERS

Type	ROF	Mag	Rng	IFR	Rnd	Damage	Pen
AGS-17	5	90B	150	1700	HE	C:2, B:12	Nil
M203/ HK-69	1	1	100	400	HE	C:3, B:12	Nil
					HEDP	C:3, B:12	4C
					CHEM	C:1, B:4	Nil
					ILLUM	B:100	Nil
Mark-19	5	50B	200	3km	HVHE	C:3, B:12	Nil
					HVHEDP	C:3, B:12	4C

ROCKET LAUNCHERS

Type	ROF	Mag	Rng	Rnd	Damage	Pen
RPG-16	1	(2)	150	HEAT	C:6, B:12	65C
M202	4	4	100	HEAT	C:4, B:4	55C
				WP	C:1, B:12	Nil
Armbrust	1	0	100	HEAT	C:4, B:4	50C

LARGE-CALIBER GUNS

Type	Round	Rng	Damage	Pen
105mm	APFSDS	500	26	80/70/60/40
Rld: 1	APFSDSDU	500	26	100/90/80/60
	HEAT	400	C:6, B:12	80C
	WP	400	C:3, B:20	Nil
120mm	APFSDS	500	28	110/100/90/70
Rld: 1	APFSDSDU	500	28	150/140/130/110
	HEAT	400	C:10, B:20	110C
	WP	400	C:3, B:36	Nil
125mm	APFSDS	500	28	100/90/80/60
Rld: 2	APFSDSDU	500	28	110/100/90/70
	HEAT	400	C:10, B:20	110C
	HE	400	C:14, B:28	1C
135mm	APFSDS	500	30	120/110/100/80
Rld: 2	APFSDSDU	500	30	130/120/110/90
	HEAT	400	C:12, B:20	120C
	HE	400	C:16, B:28	1C

AUTOCANNON

Weapon	ROF	Mag	Rng	Ammo	Damage	Pen
23mm	10	100B	250	API	2	-2/-3/-4
			250	HE	C:1, Brst:2	-8C
25mm	5	100B	250	APFSDSDU	14	10/6/2
			250	API	14	0/-2/-4
			250	HE	C:1, Brst:2	-8C
30mm	5	100B	250	API	16	6/3/1
			250	HE	C:1, Brst:2	-6C
40mm	5	700	300	HE	C:3, Brst:6	-5C
			300	HEPXPFF	C:3, Brst:14	Nil
75mm	3	36	400	APFSDS	22	30/20/10
			300	HEAT	C:4, B:12	50C
			300	HE	C:6, B:12	-3C
			300	WP	C:2, B:12	Nil
			300	HE	C:8, B:28	-4C
82mm	2	5	200	HE	C:8, B:28	-4C
			200	HEDP	C:7, B:20	15C
			200	WP	C:2, B:20	Nil
			—	ILLUM	B:1000	Nil

HOWITZERS

Type	Round	DFR	Damage	Pen	
122mm	HE	300	C:16, B:28	1C	
	IF: 15km	HEAT	300	C:10, B:20	100C
	Rld: 1	WP	300	C:3, B:36	Nil
	Chem	300	C:3, B:12	Nil	
	ICM	—	B:36	Grenade	
152mm	ILLUM	—	B:1500	Nil	
	HE	300	C:24, B:36	3C	
	IF: 19km	APHE	350	C:8, B:12	80C
	Rld: 2	WP	300	C:3, B:44	Nil
155mm	CHEM	300	C:3, B:28	Nil	
	ICM	—	B:60	Grenade	
	ILLUM	—	B:2000	Nil	
	HE	350	C:30, B:36	3C	
	IF: 24km	HEAT	350	C:20, B:28	110C
	Rld: 2	WP	350	C:3, B:44	Nil
	CHEM	350	C:3, B:28	Nil	
	ICMDP	—	B:60	Grenade	
	ILLUM	—	B:2000	Nil	
	FASCAM	—	B:124	Mine	

MORTARS

Type	Round	Damage	Pen
60mm	HE	C:5, B:20	Nil
	IF: 4km	WP	C:2, B:12
	ILLUM	B:400	Nil
81mm	HE	C:8, B:28	-4C
	IF: 4.5km	WP	C:2, B:20
	ILLUM	B:1000	Nil
4.2 Inch	HE	C:12, B:36	-2C
	IF: 6km	WP	C:3, B:36
	ILLUM	B:1500	Nil
	ICMDP	B:36	Grenade
	CHEM	C:3, B:12	Nil
120mm	HE	C:16, B:44	0C
	IF: 6km	WP	C:3, B:36
	ILLUM	B:1500	Nil
	CHEM	C:3, B:12	Nil

ANTITANK MISSILES

Type	Rld	Rng	Damage	Pen
Tank breaker	2	2000	C:6, B:4	90C
TOW II	2	3500	C:12, B:12	160C
AT-4 Spigot	3	2000	C:6, B:4	90C
AT-5 Spandrel	2	3500	C:12, B:12	110C

ICM ATTACK TABLE

Round	Close	Adj	Conc	Burst	Pen
4.2" ICMDP	1-2	2	3	12	4C
122 ICM	1-3	2	3	12	Nil
152 ICM	1-4	3	3	12	Nil
155 ICMDP	1-4	3	3	12	4C
203 ICMDP	1-5	4	3	12	4C

DIRECT-HIT CHANCE

Chance	Unit
1	Personnel
1-5	Vehicle

FASCAM MINE DENSITY TABLE

Type	M/S	Depth
RAAM	.01	248 (31 squares)
ADAM	.04	248 (31 squares)

FRAGMENTATION ATTACK TABLE

Range	Mult.	1 Hit	Miss	Dam	Pen
1xBurst	1-3	4-6	7-10	2	1
2xBurst	1	2	3-10	1	Nil

BURN DAMAGE

Source	Damage
WP	2D6
Thermite	2D6
Fuel	1D6
Structure	1D6

Note: All damage dice are per second except for structure, which is per phase.



VEHICLE COMBAT DAMAGE TABLES

VEHICLE HIT LOCATION CHART

Die	Turreted	CIH	Standard
1	Turret	Turret	Hull
2	Turret	Hull	Hull
3	Hull	Hull	Hull
4	Hull	Hull	Hull
5	Hull	Hull	Hull
6	Suspension	Suspension	Suspension
7	Suspension	Suspension	Suspension

Note: +1 to die roll for side shots.

Suspension Damage: Minor cuts speed in half; major immobilizes.

Two minor damage results equal major damage.

Abbreviations: *CIH:* Crew in hull (small turret).

VEHICLE DAMAGE RESOLUTION CHART

P-AV	Result
0 or less	No effect
1 to 10	1 minor damage result
11 to 20	2 minor damage results
21 to 40	1 major damage result
41 to 60	2 major damage results
61 or more	3 major damage results

Abbreviations: *P-AV:* Penetration minus armor value.

DAMAGE TABLE: TURRETED VEHICLES

Minor Turret		Minor Hull	
Die	Minor Result	Die	Minor Result
1	1 crewman	1	1 crewman
2	1 crewman	2	Loader*
3	Sight/vision	3	2 passengers**
4	Traverse	4	2 passengers**
5	Secondary	5	Radio
6	Major turret	6	Major hull

Major Turret		Major Hull	
Die	Major Result	Die	Major Result
1	2 crewmen	1	Engine
2	2 crewmen	2	Engine
3	Main armament	3	Fuel
4	Main armament	4	Fuel
5	Ammo	5	Ammo
6	Minor hull	6	Ammo

*Loader is either a hit on the autoloader mechanism or the actual crew loading the gun. Becomes a driver hit if neither are present.

**Two passengers result becomes a one crewman hit if this is not a passenger-carrying vehicle. If it is a passenger-carrying vehicle but no passengers are present, the hit has no effect.

DAMAGE TABLE: CREW-IN-HULL VEHICLES

Minor Turret		Minor Hull	
Die	Minor Result	Die	Minor Result
1	Loader	1	1 crewman
2	Sight/vision	2	Loader*
3	Sight/vision	3	2 passengers**
4	Traverse	4	2 passengers**
5	Secondary	5	Radio
6	Major turret	6	Major hull

Major Turret		Major Hull	
Die	Major Result	Die	Major Result
1	Main armament	1	Engine
2	Main armament	2	Engine
3	Main armament	3	Fuel
4	Main armament	4	Fuel
5	Major hull	5	Ammo
6	Minor hull	6	Ammo

*Loader is either a hit on the autoloader mechanism or the actual crewmember loading the gun. This becomes a driver hit if neither are present.

**Two passengers result becomes a one crewman hit if this is not a passenger-carrying vehicle. If it is a passenger-carrying vehicle but no passengers are present, the hit has no effect.

DAMAGE TABLE: STANDARD VEHICLES

Minor Hull		Major Hull	
Die	Minor Result	Die	Major Result
1	1 crewman	1	Engine
2	1 crewman	2	Engine
3	2 passengers**	3	Fuel
4	2 passengers**	4	Fuel
5	Radio	5	Weapon/ammo
6	Major hull	6	Weapon/ammo

*Loader is either a hit on the autoloader mechanism or the actual crewmember loading the gun. This becomes a driver hit if neither are present.

**Two passengers result becomes a one crewman hit if this is not a passenger-carrying vehicle. If it is a passenger-carrying vehicle but no passengers are present, the hit has no effect.

Vehicle Descriptions

UNARMORED CARGO VEHICLES

Light Vehicle

(HMMWV, UAZ-469, car, light truck)

Config: Stnd HF:1
Susp: W(2) HS:1
HR:1

Cargo Truck

Config: Stnd HF:1
Susp: W(3) HS:1
HR:1

ARMORED PERSONNEL CARRIERS

M-2 Bradley

Config: Trt TF: 10 HF: 14
Susp: T:4 TS: 6-Sp HS: 12-Sp
TR: 4-Sp HR: 6

M-113

Config: Stnd HF: 6
Susp: T:2 HS: 4
HR: 4

BMP-B

(Bronevaya Maschina Piekhota=armored vehicle, infantry)

Config: Trt TF: 5 HF: 4
Susp: T:2 TS: 3 HS: 3
TR: 2 HR: 3

BMP-C
 Config: Trt TF: 8 HF: 5
 Susp: T:2 TS: 4 HS: 3
 TR: 2 HR: 3

T-90
 Config: CIH TF: 100-Cp HF: 150-Cp
 Susp: T:6 TS: 50 HS: 20
 TR: 30 HR: 16

BTR-70
 Config: CIH TF: 2 HF: 3
 Susp: W(4) TS: 2 HS: 1
 TR: 2 HR: 1

SELF-PROPELLED ARTILLERY
M109A2
 Config: Trt TF: 4 HF: 10
 Susp: T:4 TS: 4 HS: 3
 TR: 4 HR: 3

OT-64
 Config: CIH TF: 3 HF: 4
 Susp: W(4) TS: 3 HS: 2
 TR: 3 HR: 2

M988
 Config: Trt TF: 6 HF: 40
 Susp: T:4 TS: 6 HS: 10
 TR: 6 HR: 8

LIGHT COMBAT VEHICLES

LAV-25
 Config: Trt TF: 6 HF: 6
 Susp: W(6) TS: 3 HS: 3
 TR: 3 HR: 3

AU-122
 Config: Trt TF: 5 HF: 6
 Susp: T:4 TS: 5 HS: 4
 TR: 3 HR: 3

LAV-75
 Config: CIH TF: 16 HF: 12
 Susp: T:2 TS: 4 HS: 3
 TR: 4 HR: 3

SAU-152
 Config: Trt TF: 5 HF: 6
 Susp: T:4 TS: 5 HS: 4
 TR: 3 HR: 3

BRDM-3
 Config: Trt TF: 2 HF: 2
 Susp: W(2) TS: 2 HS: 1
 TR: 2 HR: 1

ZSU-30-6
 Config: Trt TF: 4 HF: 6
 Susp: T:4 TS: 3 HS: 4
 TR: 3 HR: 4

OT-65
 Config: Trt TF: 2 HF: 2
 Susp: W(2) TS: 2 HS: 1
 TR: 2 HR: 1

MAIN BATTLE TANKS

M1
 Config: Trt TF: 80-Cp HF: 200-Cp
 Susp: T:6 TS: 40 HS: 16-Sp
 TR: 16 HR: 16

M1A1
 Config: Trt TF: 120-Cp HF: 300-Cp
 Susp: T:6 TS: 40 HS: 16-Sp
 TR: 16 HR: 16

M1A2
 Config: CIH TF: 120-Cp HF: 300-Cp
 Susp: T:6 TS: 40 HS: 16-Sp
 TR: 20 HR: 16

T-72
 Config: Trt TF: 70 HF: 100
 Susp: T:6 TS: 24 HS: 16
 TR: 20 HR: 10

T-80
 Config: Trt TF: 90 HF: 125
 Susp: T:6 TS: 24 HS: 16
 TR: 20 HR: 10



REFEREE'S TABLES

DEMOLITION TABLE

<i>DP</i>	<i>Concussion/Penetration</i>
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

ARMOR VALUES OF COVER

<i>Cover</i>	<i>AV</i>
Sandbag (250 mm)	5 per sandbag
2" wooden plank (50 mm)	1
Timber house wall (200 mm)	4
Cinder block wall (300 mm)	9
Stone wall (300 mm)	6
Thick stone wall (600 mm)	12
Reinforced concrete	10 per 250 mm
Tree trunk (600 mm)	12
Brick wall (100 mm)	3
Thick brick wall (300 mm)	9

NPC MOTIVATION TABLE

<i>Clubs</i>		<i>Diamonds</i>	
<i>Card</i>	<i>Description</i>	<i>Card</i>	<i>Description</i>
Ace	War leader	Ace	Generous
King	Brutal	King	Selfish
Queen	Stubborn	Queen	Lustful
Jack	Murderous	Jack	Coward
8-10	Very violent	8-10	Very greedy
5-7	Moderately violent	5-7	Moderately greedy
2-4	Somewhat violent	2-4	Somewhat greedy

<i>Hearts</i>		<i>Spades</i>	
<i>Card</i>	<i>Description</i>	<i>Card</i>	<i>Description</i>
Ace	Just	Ace	Charismatic
King	Honorable	King	Deceitful
Queen	Loving	Queen	Ruthless
Jack	Wise	Jack	Pompous
8-10	Very sociable	8-10	Very ambitious
5-7	Moderately sociable	5-7	Moderately ambitious
2-4	Somewhat sociable	2-4	Somewhat ambitious

ARMOR EQUIVALENT TABLE

<i>Material</i>	<i>mm/AV</i>	<i>AV mult.(xmm)</i>
Armor plate	5	.2
Sheet steel	6	.16
Reinforced concrete	25	.04
Concrete and bricks	35	.03
Stone, packed dirt, wood	50	.02
Loose dirt	250	.004

EXPLOSIVE PENETRATION FORMULAS

Armor value penetrated	$5(E/2 \text{ 2root})$
Explosive points	$2((P/5)^2)$

RADIATION ILLNESS CHART

<i>Slight Rads</i>	<i>Serious Illness</i>	<i>Illness</i>	<i>Death</i>
50	9.5	—	—
100	7.5	9.5	—
300	2.5	7.5	9.5
400	0	2.5	7.5
600	0	0	2.5
800	0	0	0

ENCAMPMENT DISEASES—PRESENT: 10+ (2D6)

<i>Die</i>	<i>Disease</i>
1-25	Dysentery
26-40	Food poisoning
41-55	Minor disease
56-65	Cholera
66-75	Hepatitis-A
76-85	Pneumonia
86-90	Typhoid
91-95	Typhus
96-99	Bubonic Plague
100	Pneumonic Plague

SETTLEMENT DISEASES—PRESENT: 11+ (2D6)

<i>Die</i>	<i>Disease</i>
1-20	Dysentery
21-30	Food poisoning
31-70	Minor disease
71-80	Cholera
81-90	Hepatitis-A
91-95	Pneumonia
96-99	Typhus
100	Bubonic Plague

ANIMAL DISEASES—PRESENT: 12+ (2D6)

<i>Die</i>	<i>Disease</i>
1-40	Food poisoning
41-80	Minor disease
81-90	Typhus
91-95	Rabies
96-100	Bubonic Plague

CONTAMINATED WATER—PRESENT: 12+ (2D6)

<i>Die</i>	<i>Disease</i>
1-50	Dysentery
51-75	Typhoid
76-100	Minor disease

EQUIPMENT AVAILABILITY

<i>Location</i>	<i>Very</i>			
	<i>Common</i>	<i>Common</i>	<i>Scarce</i>	<i>Rare</i>
Major city	100%	100%	80%	40%
City	100%	80%	60%	20%
Town	100%	70%	40%	10%
Village	60%	30%	15%	0%
Encounter	40%	20%	10%	0%

LANGUAGE LIST

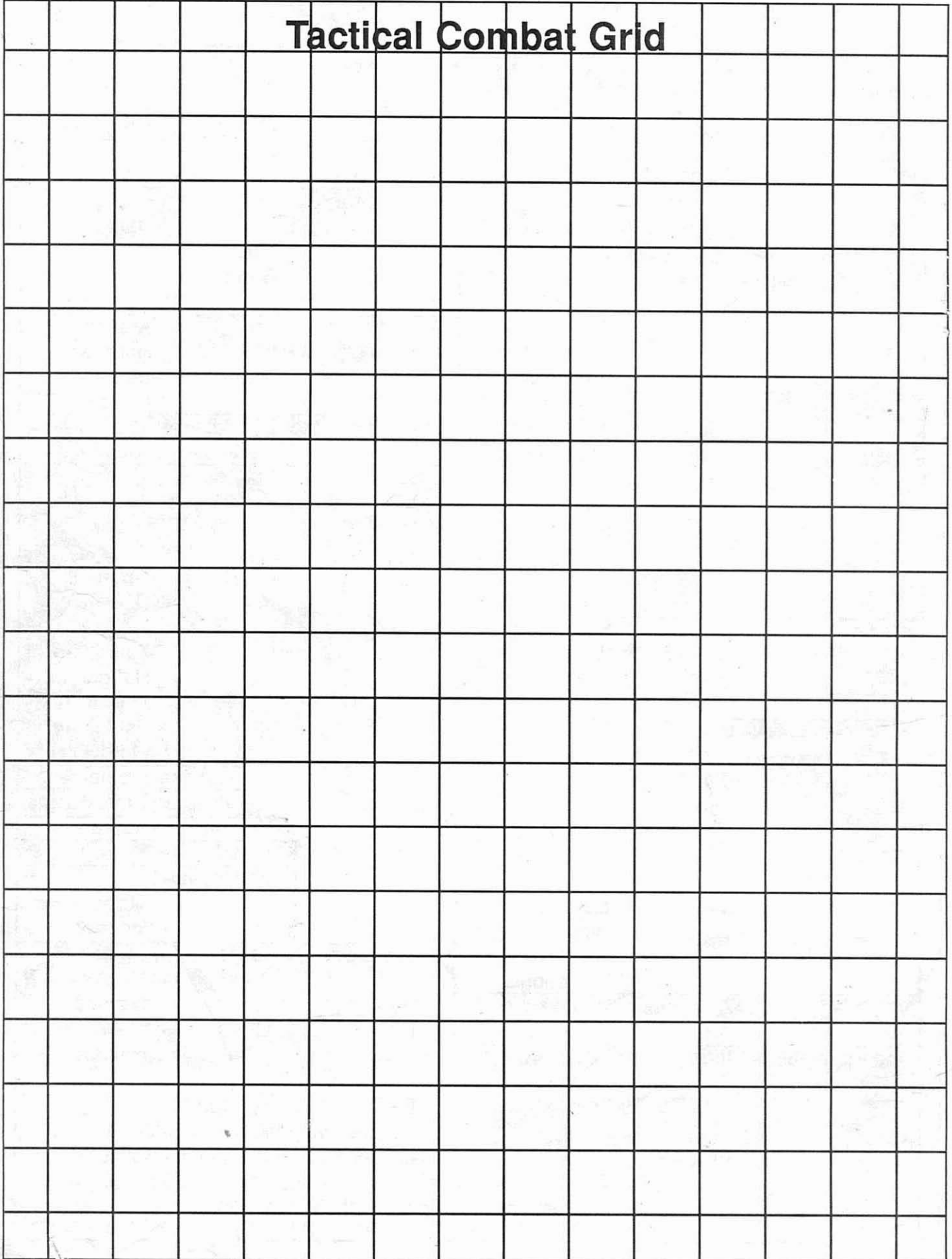
Family	Group	Language
Germanic	Anglic	English
	West Germanic	German*
		Dutch
		Yiddish Flemish
North Germanic	Danish	
	Swedish Norwegian	
Romance	East Romance	Italian
		Romanian*
	West Romance	Spanish French Portuguese
	E & W Romance	Latin
Celtic	Goidelic	Scots Gaelic
	Brythonic	Welsh Gaelic
Greek	Greek	Greek
Balto-Slavic	Baltic	Lithuanian*
		Latvian*
	East Slavic	Russian*
	West Slavic	Polish*
		Czech* Slovak*
South Slavic	Serbo-Croat Bulgarian* Slovenian Macedonian	
Albanian	Albanian	Albanian
Armenian	Armenian	Armenian
Indo-Iranian	Indic	Hindi-Urdu
		Bengali Romany (Gypsy)
	Iranian	Tajjik Parsi (Persian)

Family	Group	Language	
Caucasian	South Caucasian	Gorgian	
	Sino-Tibetan	Sinitic	Mandarin† Cantonese†
		Tibeto-Burman	Thai Burmese
Semitic	Semitic	Arabic Hebrew	
	Hamitic	Berber Hausa	
Dravidian	Dravidian	Tamil	
Japanese	Japanese	Japanese	
Altaic	Turkic	Turkish	
		Azerbaijani	
		Uzbek	
		Kazakh	
		Tartar	
		Chuvash	
		Kirzig	
		Turkoman	
			Ugric
		Finnic	Finnish Estonian* Mordvinian
Vietnamese	Vietnamese	Vietnamese	
Mon-Khmer	Mon-Khmer	Cambodian	
Korean	Korean	Korean	
Bantu	Bantu	Swahili	
Mayalo-Pol.	W. Mayalo-Pol.	Malay-Indonesian	
Amerindian	South Amerindian	Maya	
	Athabasca	Navaho	
	Uto-Aztecan	Nahuati	

*Eastern Bloc language.

†These two languages (Mandarin and Cantonese) are mutually unintelligible in their spoken form, but they are 100-percent intelligible in their written form.

Tactical Combat Grid



COMBAT

Each combat turn is 30 seconds long and is divided into six five-second combat phases. One action may be performed by a player in a combat phase, and each action takes one combat phase to complete. An action is a *precisely defined activity as listed below*.

Many activities can be resolved using the combat turn instead of resolving each combat phase in order, and the referee should feel free to do so when the situation warrants such action. In this case the players will tell the referee what they are doing during the turn. The referee will resolve the activities of the NPCs, resolve fire, and tell the players what their PCs see and hear. In many cases, however, a more rigorous division of time and action is necessary.

INITIATIVE

The number and order of actions that a character may conduct in a turn are determined by his initiative number, which ranges from one to six initially (but which may be reduced later due to panic or wounds). Player character initiative is determined by the character's coolness under fire, while NPC initiative is determined by his experience level. This is shown below and summarized in the referee charts on page 28.

PC	NPC	
Cool	Type	Init
0	—	6
1	Elite	5
2	Veteran	4
3, 4	Experienced	3
5, 6	—	2
7+	Novice	1

A character's initiative is reduced by one if he is slightly wounded and by three (total) if he is seriously wounded. If a character's initiative level is reduced to zero, he may not act at all.

ACTIONS

A character may perform one action in each combat phase (except as specifically noted elsewhere). Actions are chosen when it is actually time for the character to act. The possible combat actions are listed below.

Fire: The character fires his weapon at any target which is currently visible to him or which has been visible during the current phase at some point. With some weapons, this action may be combined with a walk or trot.

Aim: Aiming improves the chances of hitting a target. It is done immediately before firing. Aiming at a target or area also enables a character to fire at any target which moves through his line of sight later.

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

Melee: This constitutes an armed attack with a melee weapon, and it may be combined with a walk or a trot.

Body Combat: This constitutes an unarmed or hand-to-hand attack. There are four types which must be specified: *strike, grapple, escape, and diving blow*. This action may be combined with a walk or trot. A diving blow may also be combined with a run.

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

Crawl: The character moves two meters.

Walk: The character moves eight meters (one grid square).

Trot: The character moves 16 meters (two grid squares).

Run: The character moves 32 meters (four grid squares).

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 in half the distance moved in an action.

Drive/Ride: The character is either driving a vehicle or riding an animal. In either case, he must specify the speed (and whether or not it is the vehicle or animal's safe speed) to the referee. (See movement on page 37).

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 phase. While talking can be combined with most other actions, it cannot be combined with firing.

If trying to talk on a radio, a PC should first spend a phase giving his call sign and that of the PC he is calling, as in "Red Dog, this is Can Can. Over." Unless the other PC has his radio ready to transmit, it will probably take him one action to ready his radio 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 about enforcing the need for an acknowledgement to a transmission before another is sent. Communication by radio is difficult, time-consuming, and confusing if not done properly. In the interests of playability, we do not include rules for static, slipping off frequency, weak batteries, or any of a number of confounding problems. Instead, the referee should simply require that a fairly deliberate and clear radio procedure is followed.

TURN SEQUENCE

The six phases of a turn are numbered from 6 down to 1, with phase 6 coming first, phase 5 second, and so on. In each phase all characters with an initiative equal to or greater than the phase number may conduct an action. In phase 4, for example, all characters with initiatives of 4, 5, and 6 conduct actions.

Actions in each phase are conducted in a specific order. The characters with the same initiative as the phase number go first, followed by the next highest initiative, followed by the next, and so forth. The referee will moderate this flow of actions by calling out initiative numbers in the order in which they act. When a player's initiative number is called, he will tell the referee the action his character is conducting, as in "firing at the soldiers behind the wall." The referee will also announce the actions for any NPCs acting at that point, provided that they are detectable to the PCs. The referee then resolves all combats and calls the next initiative number.

The effect of this sequence is to limit the number of actions a player can perform to his agility rating and also regulate the sequence of actions in a turn. A typical turn proceeds as follows.

- Phase 6: 6 acts.
- Phase 5: 5 acts; 6 acts.
- Phase 4: 4 acts; 5 acts; 6 acts.
- Phase 3: 3 acts; 4 acts; 5 acts; 6 acts.
- Phase 2: 2 acts; 3 acts; 4 acts; 5 acts; 6 acts.
- Phase 1: 1 acts; 2 acts; 3 acts; 4 acts; 5 acts; 6 acts.

Agility and Weapons Bulk: If two characters have the same initiative and are conducting at the same time actions which may

interfere with each other (such as firing at each other), the character with the highest agility goes first. However, for purposes of this determination, subtract the bulk rating of the character's weapon from his agility.

Repetition: A character who decides to do exactly the same thing for an entire turn may conduct that action in every phase of the turn. All repetitive actions are conducted at the beginning of the phase, regardless of the initiative level of the characters conducting them. However, if a character interrupts a repetitive action in the middle of a turn, he may not take any other action until his next regular opportunity to do so in the action sequence, and his next action must be to go prone or duck behind cover.

Opportunity Fire: A character may fire opportunity fire in a phase in which he would normally not be able to take an action. Once he fires opportunity fire in such a phase, however, he may not do so again until he has conducted an additional aim action.

If a character is aiming in a specified direction or at a specific area and an enemy character passes through his line of sight, he may immediately fire on the enemy. This is resolved as if it happened simultaneously with the enemy movement. If the enemy was visible at the beginning of his action, the first shot fired counts as an aimed shot; otherwise, all individual shots are quick shots. (Automatic fire is possible instead, but then no shots count as aimed fire. See the automatic fire rule on page 36.)

Once the player fires, he has finished his action for that phase and may not take another, even if it is his turn to do so. In the next phase the character is still considered to be aiming at the same point until he takes some other action.

A player may only conduct opportunity fire once during a phase.

Ambush: An ambush consists of one or more characters firing from previously undetected positions at an enemy force. Since the ambushers will be undetected, it is probable that the moving force is conducting regular movement. For purposes of this first combat turn, all characters in the moving force with an initiative other than 6 are conducting repetitive movement and thus move every phase. (Players with an initiative of 6 may do so normally.) The ambushers may open fire when one or more of their troops reaches an initiative point or, if they are aiming, when the moving force enters their line of fire.

PANIC

Whenever a character is knocked down by wound damage (see the effects of wounds, later) 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 will panic. This is not blind panic which sends him screaming away, but rather causes him to momentarily freeze.

To determine if a player panics, roll 2D6. If the result is equal to or less than his coolness rating, he panics. He may not conduct any action for one combat phase or the number of phases by which his coolness exceeds the die roll, whichever is greater. However, if he is forced to freeze for more than one combat phase, he may go prone on the second phase and remain there until able to move again.

NPCs use a different system. The referee rolls 1D6, and the NPC panics if the roll is greater than his initiative level. The NPC freezes for one turn or the number by which the die roll exceeds his initiative, whichever is greater.

Vehicle drivers who panic will stop their vehicles and not start again until they recover from the panic. Drivers of unarmored vehicles who panic for more than one phase will stop in the first

phase and jump out of the vehicle to go prone in the second phase of panic.

Note that it is easier for NPCs to panic than it is for player characters. Note also that player characters with a coolness of 0 or 1 never panic, while even Elite NPCs may. (It's good being a player character.)

Commentary

To the great many detail changes in the revised combat system are added three really major ones. Two (recoil and the new automatic fire rules) deal with fire combat, while the other is the new initiative and turn sequence rules presented above.

The original rules covering coolness under fire and hesitations were intended to show that, under the stress of combat, certain individuals perform much more efficiently than others. The rules covered this by requiring most characters to program in a fixed number of "hesitation" actions in their turn. While this might be a good theory, in practice it proved to be very cumbersome, especially for referees trying to run 10 or 20 NPCs at different experience levels.

The revised system is a genuine step forward in that it does not require either the referee or the player to remember how many hesitations a character is required to take and how many he already has this turn. Instead, all he needs to know is one number: initiative. Everything else flows naturally from that number and its interaction with the phase numbering system.

A number of minor changes were required by the new sequence and initiative rules—notable among them being opportunity fire—since actions within a phase have become nonsimultaneous. Of course, characters with an initiative of 6 will seldom need it. Since they act at the end of the phase, they can merely wait to see what everyone has done and then pick their targets and pop away. They may want to use it to enable them to fire earlier in the next action phase, however. Low initiative characters, on the other hand, need this option very much, as otherwise they will be unable to fire at a high initiative character ducking from cover to cover.



FIRE COMBAT

Fire combat can be conducted at considerably greater distances than either body combat or melee combat. Fire combat weapons (and hand grenades) are listed on the weapons charts (page 22), which give information on each weapon. Weapons capable of firing more than a single round have one listing per round. The use of this information is explained in the subsequent rules.

There are two general varieties of fire combat: direct fire and indirect fire. Direct fire is conducted when the gunner can actually see his target and fires a round directly at it with the intention of obtaining a direct hit. Indirect fire is usually conducted when the gunner cannot see the target and instead fires at a high angle to lob his round over intervening terrain obstacles with the intention of coming down in the close vicinity of his target. For the most part, only certain heavy weapons (grenade launchers, mortars, and howitzers) are capable of indirect fire. Direct fire is further divided into small arms fire and heavy weapons fire, as different rules are used to resolve them. Both types share certain basic characteristics.

Human Limits: A single character can fire only one weapon at a time (including a tank gunner, who usually has both a cannon and a machinegun in his turret). If a character has no skill in a particular weapon type he may not fire it.

Rate of Fire: Each shot in the game represents a single bullet. It is possible to fire more than a single bullet from most weapons in a five-second action phase. All weapons in the game have either a reloading (Rld) rating or a rate of fire (ROF) rating.

Weapons with a reloading rating hold only one round in the weapon at a time, may only fire the one round which is loaded during a fire action, and must then reload before firing again. The reload rating is the number of reloading actions necessary to reload the weapon. If the weapon has more than one loader as part of its crew, each loader must spend the indicated number of actions reloading. For each loader missing from the gun crew, add one to the reloading time for the others.

Weapons with a rate of fire listing have either a letter code or a number. The various letter codes mean the following:

SS: Single Shot: This weapon can only fire once per firing action and must then be reloaded.

BA: Bolt Action: Each time the rifle is fired the bolt mechanism must be worked to eject the spent cartridge and move a fresh cartridge from the magazine to the chamber. Bolt-action rifles may be fired one per action phase. The working of the bolt is assumed to take place as part of the same action.

LA: Lever Action: Each time the rifle is fired the lever must be worked to eject the spent cartridge and move a fresh cartridge from the magazine to the chamber. Lever-action rifles may fire once per action phase, the same as bolt-action rifles.

PA: Pump Action: Each time the shotgun is fired the lever must be worked to eject the spent shell and move a fresh shell from the magazine to the chamber. Pump action weapons may fire three shots per action phase.

DAR: Double-Action Revolver: A double-action revolver does not have to be cocked between shots, as the first part of each trigger pull cocks the hammer. (A single-action revolver must be cocked between each shot. There are no single-action revolvers in the game.) This makes the trigger pull somewhat harder than in a semiautomatic pistol. It can fire three shots per action phase.

SA: Semiautomatic: This weapon will fire one bullet with each squeeze of the trigger, and the force of the firing round is used to recock the weapon. Semiautomatic weapons may fire up to five shots per action phase.

Weapons with a number instead of a letter are capable of full-automatic fire as well as semiautomatic fire. The number shown is the number of bullets in a typical burst from the weapon. Each automatic weapon can fire up to either five individual shots or five bursts per fire phase.

A character reduces the number of single shots or bursts he may fire in the phase by one each time he switches targets. This means that as a practical matter no character may fire at more than three different targets in the same fire phase.

Reloading: All small arms have a feed listing, which consists of a number and, in some cases, a letter code. This shows the type of feed device used for ammunition in the weapon and the number of bullets in it. The most common form of feed device in small arms is a box magazine, which attaches through the stock or pistol grip. Weapons with no letter code after their feed value are fed by box magazines, each of which contain the number of bullets shown.

One reloading action is sufficient to detach an empty box magazine and insert a full one.

Feed Devices

Other forms of feed devices are noted by letter code:

R: Revolver: A revolver's feed device is a nondetachable revolving cylinder which usually holds six bullets. If loaded individually, three bullets can be loaded into the cylinder per reloading action. If a quick-loader is available (a circular clip holding six cartridges which enables all six to be dropped into the open cylinder at once), one reloading action is sufficient to reload the weapon.

I: Individual: Weapons with nondetachable magazines, particularly under-barrel, tubular magazines, often have to be reloaded one bullet at a time. Up to three bullet may be loaded into an i-class feed device per reloading action.

B: Belt: The weapon, either a machinegun or automatic rifle, is fed by a belt usually containing from 50 to 100 bullets. Two reloading actions are necessary to replace a belt. However, if the machinegun has a two-man crew (gunner and loader), this requirement can be met by both crewmembers expending one action reloading in the same phase.

C: Cassette: A cassette is a large, self-contained ammunition feed system which takes one full *turn* to replace.

Direct-Fire Hit Procedure

Direct fire is the most common form of combat in the game. In direct fire the target is visible to the firing character. Direct fire is conducted with both small arms and heavy weapons.

Small arms are rifles, pistols, machineguns, shotguns, and similar weapons. Their two principal distinguishing characteristics are that they are generally man-portable, and they fire a simple non-exploding round of less than 20 mm in diameter. Small arms fire can be directed at any sort of target but is usually directed against personnel.

Heavy weapons fire rounds are 20 mm in diameter or greater, and are capable of containing a significant explosive filler. Some heavy weapons (such as grenade launchers, rocket launchers, and some antitank missiles) are man-portable, but many must be mounted on vehicles or heavy field carriages (such as howitzers). Heavy weapons use high explosive (HE) and other similar ammunition to attack troops and soft vehicles, but many also have an array of specialized rounds for attacking armored vehicles.

The chance of hitting a target with individual shots is dependant primarily on three things: marksmanship, range, and recoil. The combination of these factors will produce a percentage chance of

hitting a target. The player or referee then throws percentage dice once for each bullet fired. If the hit percentage or less is rolled, the target is hit. Any other roll is a miss.

Marksmanship: All small arms use CRM as their marksmanship skill, except for hunting bows, which use HB skill. Large-caliber guns and howitzers use LCG skill. Grenade launchers use CRM or HW, whichever is greater. All other heavy weapons use the HW skill. The appropriate skill level is the percentage chance of hitting a target with an aimed shot at close range.

An aimed shot is one which takes place after the character has spent one action aiming his weapon. A target must be visible in both the aiming and firing phases for an aimed shot to take place, and the character must tell the referee which target he is aiming at when he conducts the aiming action.

If more than one shot is fired in a phase, only the first shot counts as aimed; all subsequent shots are considered "quick" shots. In addition, any shot fired which does not follow an aim action, or which is fired at a target other than the one aimed at, counts as a quick shot. All quick shots are conducted with the marksmanship skill halved.

Range: Four ranges for direct fire are short, medium, long, and extreme. The value printed in the range column of the weapons tables (page 22) is the weapon's short range in meters. Medium range is twice short range; long range is twice medium; and extreme range is twice long.

For example, a weapon with a printed range of 50 has a short range of 50 meters, a medium range of 100 meters, a long range of 200 meters, and an extreme range of 400 meters.

The full CRM skill (or half skill if firing a quick shot) is only used to determine hits at close range. At medium range multiply the appropriate skill by 50 percent. At long range multiply it by 25 percent. At extreme range multiply it by 10 percent. Note that this means the chance of hitting with a quick shot at extreme range is only five percent of the character's CRM skill.

Sniper Scopes: Only sniper rifles may have sniper scopes mounted on them. The printed range on the table (page 22) is for the rifle without a scope. If a scope is mounted, add 15 to the printed range figure when conducting aimed shots. In addition, aimed shots at extreme range are conducted as if at long range for purposes of hit determination. Note that scopes have no effect on quick shots.

For example, a rifle with a printed range of 75 and a scope would be treated as having, for purposes of aimed fire, a close range of 90 meters, a medium range of 180 meters, a long range of 360 meters, and an extreme range of 720 meters.

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 arm 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 phase 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 phase, compare the total to the firing character's strength. If the recoil is equal to or less than his strength, fire is resolved normally. If it is greater than his strength, reduce the hit percentage by 10 times the difference.

For example, if the cumulative recoil of a weapon were 18 and the firing character's strength were 15, the final hit number would be reduced by 30 (3x10). If the character were firing an aimed shot

with a 70-percent chance of hitting and two additional quick shots each with a 35-percent chance of hitting, the hit chances would be reduced to 40 percent for the aimed shot and 5 percent for each of the quick shots. From this it can be seen that 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 separately below.

Pistols: Pistols may be steadied by using both hands and bracing yourself. This may only be done while stationary and reduces the printed recoil by one.

Two Weapons: If a character is carrying two weapons at once (one in each hand), he may fire either one, but not both. For purposes of controlling the recoil of either weapon, his strength is reduced by 10%, rounding fractions down.



Commentary

The section of rules on fire combat introduces two radical changes from the first edition **Twilight** combat rules: the resolution of each bullet fired and the concept of recoil.

Having each game "shot" represent the effects of three bullets fired in the original game caused more confusion than any other single feature of the rules. I cannot begin to estimate the number of letters that began, "How come your magazine capacities are only one-third as big as they ought to be?" My original motive in lumping everything together was two-fold. I wanted to minimize the die rolling, especially for automatic fire, and I wanted to keep bookkeeping of ammunition under control. Both of these are probably laudable goals, but the end result was unquestionably unpopular. How we have dealt with the question of automatic fire and ammunition bookkeeping is discussed in the following rules sections and mentioned a few paragraphs down in this commentary. I think you will find it superior to the old rules by a substantial margin.

The other major change is the inclusion of recoil as the principal limitation on rate of fire. This particular inspiration came out of two entirely different experiences. First, I noticed that the combat system in FASA's new game *Shadowrun* uses recoil for automatic weapons, and I recall thinking, "Hm. What an interesting idea." We use recoil very differently here, but that system planted the idea in my head.

The second event was my wife expressing a mild interest in someday learning to fire a pistol on a range. In the course of the conversation she opined that she would rather fire a small pistol, like a little automatic, rather than a big heavy revolver. What I told her was that she would probably have an easier time controlling a large-framed revolver than a small-framed automatic, since the heavier pistol absorbs more of the recoil. Somewhere about this point in the conversation I slapped my forehead and began rummaging around for a pen and pad of paper (a behavior Tessa has long since grown used to).

In the revised combat system, recoil is a function not only of the power of the cartridge fired, but also the weight of the weapon. So you have results such as the Beretta 9mm Parabellum (upon which the game's 9mm Parabellum is modelled), with a loaded weight of about 1.2 kilograms, being more controllable than the Makarov, with a loaded weight of 0.8 kilograms, even though it fires a more powerful cartridge. The adoption of a three-round burst governor on the M-16A2 is also handy in giving the firer a little more control over his rifle.

One final dividend of recoil was that it enabled us to dispense with the rather arbitrary categories of weapons as a means of limiting fire during movement. As the later rules sections will point out, this is now solely a function of recoil and the character's ability to control his weapon.

As I mentioned above, I lumped firing into three-round bursts in the original game both to simplify ammunition bookkeeping and to avoid a million detailed percentile die rolls for automatic weapons fire. Upon further consideration, I have concluded that these were misplaced concerns.

As to ammunition bookkeeping, I'm not sure that dividing everything by three actually saved all that much bookkeeping. You still had to keep track of how much ammunition was in your gun, your belt, your pack, your secret stash, and so forth. Once you do all that, just making three check marks instead of one doesn't add all that much more to the process. Furthermore, I've since given some thought as to an easy ammunition record form, and that's

been included with this book for photocopying. Using this form probably makes ammunition bookkeeping easier than before, even though there is three times as much ammunition to keep track of.

As to the large number of bullets flying around when people put their selector switches on rock 'n' roll, I think what escaped me was that single shots are to auto fire as man-to-man defense is to zone defense. That is, automatic fire isn't just more of the same—it is fundamentally different. A rifleman attempting to hit a target with single shots does so by trying to hit the target with each of one or more aimed shots. (The name "quick shot" is really an aimed shot; it just isn't aimed as well.) On the other hand, a submachinegunner, or rifleman with an assault rifle on full automatic, tries to hit a target by saturating its general area with bullets under the assumption that something is bound to hit. Marksmanship doesn't much enter into it.

Once I was willing to treat auto fire differently than aimed fire, I quickly came up with a fairly simple system to cover it, which I think does a pretty good job. There's a lot of die rolling, but you can do it all at once; just make sure you've got a whole bunch of six-sided dice and a good box lid to throw them in. Players who insist on making each D6 roll separately should be disciplined.

AUTOMATIC FIRE

The hit procedure for automatic fire differs from individual shots. Whenever a character fires a weapon on its automatic fire setting, he fires one or more bursts of rounds. The number of rounds in a burst is the number listed in the weapon's ROF column. Each time a burst is fired, roll a number of D6 equal to the number of rounds in the burst. Each 6 rolled is a hit.

For example, a weapon with a ROF of 5 fires five shots per burst, and any automatic weapon may fire up to five bursts in a fire phase (see Rate of Fire on page 34). If a character fired all five allowed bursts, he would roll 25D6 for hits.

The actual number of dice rolled per burst, however, may be reduced by range and/or recoil.

Range: Subtract one die from each three-round burst, two dice from each five-round burst, and three dice from each 10-round burst for each range band beyond close. For example, a small arm weapon which fired 10-round bursts would roll 10D6 per burst at close range, 7D6 at medium, 4D6 at long, and 1D6 at extreme range. A weapon which fired five-round bursts would fire 5D6 at close range, 3D6 at medium, and 1D6 at long.

Recoil: Recoil is calculated in the same way as for individual shots. If it is greater than a character's strength, reduce the number of dice rolled per burst by the difference. For weapons with 10-round bursts, reduce the number of dice rolled per burst by twice the difference.

For example, a character with a strength attribute of 10 fires an Uzi submachinegun in an action phase. The Uzi fires five rounds per burst, and the character decides to fire a total of three bursts (15 rounds). Examining the Submachineguns Table (page 22), he finds that the Uzi has a burst recoil of 4. Since he is firing three bursts, the total recoil in the phase is 12, which is two higher than his strength. As a result, he subtracts two dice from each burst fired, leaving him with a total of 9D6 rolled for hits.

Danger Zone: The danger zone is the area where characters not actually aimed at may be hit by stray bullets from a burst of automatic fire. The danger zone is an area four meters to either side of a line drawn between the firing PC and the target, including all potential targets within the same range band as the target.

Once a PC had rolled all his automatic fire hit dice and noted how many rounds hit, he takes half the dice which missed (rounding fractions down) and rolls them again. Each 6 rolled on this second set of dice is a hit inflicted on other targets 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 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 phase. A full phase for the purposes of this rule is the remainder of the current phase and all of the next until the firing player's initiative point. However, if the firing player does not have an initiative point in the next phase, then the fire lasts only until the end of the current phase. Note that by careful use of this effect, automatic weapons fire can be used to interdict movement or keep enemy troops under cover by simply firing through open doorways, over the tops of walls, etc.

Minimum Dice: A three- or five-round burst will never be reduced to less than one die per burst, regardless of the number of reductions for range and/or recoil made. A 10-round burst will never be reduced to less than two dice per burst.

Long Bursts: The M214 has a burst size of 50. Treat this as a 10-round burst for purposes of hit determination, but each hit achieved counts as three actual hits.

MOVEMENT AND FIRE

Movement by either the firing character or the target reduces the chance of scoring a hit.

Advancing Fire: Characters may not fire while crawling or running. No aimed fire is possible while walking or trotting, but characters may fire quick shots or bursts normally. For purposes of controlling recoil, however, a walking character's strength is reduced by 10 percent, and a trotting character's strength is halved, rounding fractions down.

Fire From Moving Vehicles: Characters may not conduct aimed fire from a moving vehicle. They may fire quick shots or bursts normally. All such fire, however, is conducted as if at one range band greater than the actual range for purposes of determining hits.

The six tanks in the basic game—as well as the M-2 Bradley, BMP-C, and LAV-25—all have stabilized main armaments which allow aimed fire while moving. All of them may fire while moving at the safe speed both on and off road. The U.S. tanks and M-2 Bradley may fire while moving at twice their safe speed.

Fire From the Saddle: Characters firing while mounted on a draft animal or saddle horse fire in the same manner as dismounted characters, with two exceptions. First, their movement category is based on the movement of the animal. Thus, characters on running animals may not fire at all. Second, the marksmanship skill used to determine the chance of hitting with single shots is either the character's appropriate weapons skill or his EQ skill, whichever is *lower*.

Target Movement: If the target is moving 30 meters or more in the current phase, it is treated as if it is one range band further away for purposes of hit determination.

AMMUNITION

Every time a weapon fires it uses ammunition. An ammunition form has been provided which should be photocopied, and you are specifically given permission to do so. The form is laid out for both ammunition belts and box magazines. Players should each have

one or more copies of this form to keep track of the ammunition their characters are carrying.

Write down by each magazine the type of bullets loaded, and mark off the excess rounds so that the number of boxes is equal to the number of bullets loaded. When a magazine is loaded into weapon, the player simply circles it on his form, and marks off bullets as they are fired. The boxes are laid out in rows of five each, so most weapons can record bursts fired by marking off one or two complete rows. It is suggested that individual shots be marked off from the top of the magazine form and bursts marked off from the bottom.

A 32-round box magazine for a 9mm submachinegun is shown above.

Magazine

□	□	■		
□	□	□	□	□
□	□	□	□	□
□	□	□	□	□
□	□	□	□	□
□	□	□	□	□
□	□	□	□	□
□	□	□	□	□
Caliber <i>9mm?</i>				



SPECIAL CASES

The following special cases further modify the basic firing rules.

Target Obscured: If the target is partially obscured (in brush, fog, mist, light smoke, etc.), it is treated as if it is one range band further away for purposes of hit determination.

Firing at Riders: If the target is a rider on an animal, motorcycle, or bicycle, the firing character must declare whether he is firing at the rider or the mount. In either case fire is resolved normally, but if a single shot misses its target it has a 10-percent chance of hitting the other. In the case of automatic fire, misses are rerolled for additional hits on other targets in the danger zone as noted above, but half of all additional hits are taken on the other target.

Rangefinders: Vehicle-mounted and towed large-caliber guns and howitzers have rangefinders which provide a fire bonus to the gunner's marksmanship. The bonus may only be used for aimed shots and only when shooting at vehicles or other large targets (such as buildings). The entry in the equipment list for each vehicle or towed gun gives its rangefinder bonus. This bonus is added to the gunner's modified marksmanship at medium and long range. Half of the bonus is added at extreme range.

Note that factors which cause a target to be treated as being at a longer range (such as movement or obscuration) do not change the rangefinder bonus used, only the effective marksmanship of the gunner. For example, firing at an obscured target at close range is treated as if at medium range for determining the gunner's effective skill; it does not allow use of the medium-range rangefinder bonus.

Multiple Modifiers: All modifiers to the number of dice rolled or the range at which fire is delivered are cumulative, and may reduce to zero the chance of obtaining a hit or the number of dice rolled from a burst. However, when firing single shots (either aimed shots or quick shots), all rolls of 91 or higher miss the target, and all rolls of 1 hit the target, regardless of the character's skill level or any modifications to it.

GUNSHOT WOUNDS

Each time a character is hit by fire he is wounded. The extent of the injury is determined by three factors: hit location, weapon damage, and target protection.

Hit Location: Whenever a character is hit, roll 1D10 and consult the Man/Animal Hit Location Chart (page 23). This indicates the body part struck and injured by the shot.

Weapon Damage: All weapons do the same damage at all ranges. The damage value of the weapon is listed on the weapons chart (page 22) and is the number of D6 rolled. Some weapons have a damage value of -1. In this case, roll the die and subtract one from the result.

Some weapons fire exploding rounds. These weapons have a damage rating consisting of two separate listings: concussion and burst. The effects of explosions are treated separately on page 40.

Target Protection: If the target is wearing body armor and the bullet strikes a protected body part, the bullet may not be able to penetrate the armor. Flak jackets and kevlar vests protect both the vest and abdomen. Helmets partially protect the head. If the target is hit in the head, roll 1D6. The bullet strikes a steel helmet on a roll of 1-3, a kevlar helmet on a roll of 1-4.

Each weapon has a penetration rating that reflects its ability to punch through armor. This rating may consist of the simple notation "nil," indicating that the bullet will be stopped by any armor protection, or it may have up to three different numeric ratings. If so, the first rating applies to both close and medium range, the

second to long range, and the third to extreme range. If a weapon's penetration drops to nil at any range band, it remains unable to penetrate armor at longer ranges, so no additional entries are made.

The penetration value of a weapon is the number of damage dice it loses for each armor value it is required to penetrate. Multiply the target's armor protection by the weapon's penetration value and subtract the result from the weapon's damage value. If the remainder is a positive number, the bullet penetrates and rolls that many dice for damage. If the remainder is zero or a negative number, the bullet fails to penetrate.

For example, a character fires an FAL at medium range and hits his target in the chest, which is protected by a kevlar vest. The FAL has a damage value of 4, a penetration at medium range of 3, and the kevlar vest has an armor value of 1. Multiplying the penetration (3) by the armor value (1) and subtracting the result (3) from the weapon's damage value (4) shows that the FAL penetrated the vest and did one die of damage.

Blunt Trauma: When a small arms bullet strikes a person, it packs considerable force and will cause injury even if it does not penetrate the target's body armor. This is called blunt trauma. A target suffers one actual point of damage for each die worth of damage absorbed by the armor. Note that bullets which penetrate and cause some normal wound damage will also cause blunt trauma.

In the example of the FAL firing above, the target would take 3 points of blunt trauma damage for the 3 damage dice absorbed by the Kevlar vest.

Cover: Characters and vehicles may hide behind obstacles as protection from fire. If the hit location rolled is covered by the obstacle, the shot has no effect unless it is able to penetrate the obstacle. The Armor Equivalent Table (page 28) gives the armor values of common types of cover.

For example, a character is under cover behind a tree. The referee decides that, since the character is firing a weapon, his head and right arm are exposed. If he is hit in the chest, the bullet strikes the tree instead and provides an armor value of 12.

Damage dice absorbed by an obstacle do not cause blunt trauma injuries against the target character.

SLAP Round: Note that the M2HB machinegun may fire the special SLAP (sabotted light armor-piercing) round in addition to its normal ammunition. Characteristics of the SLAP round are the same as the normal 12.7mm BMG round except that the penetration is superior, as noted in a footnote on page 22.

BURNS

Thermite and white phosphorus rounds burn at very high temperatures (2200 to 2700 degrees Celsius) and cause burn damage. Players may also suffer burn damage from exploding vehicles and open flames.

Characters come in contact with thermite or white phosphorus when they are hit by fragments from the explosion of the shell. Whether the character is hit and by how many fragments is determined exactly as for normal fragments, as explained in the explosion rule (page 40), but a character who is hit will suffer hit burn damage instead of a normal wound.

Characters come in contact with burning fuel by being inside or near a vehicle when its fuel tanks explode. The primary burst radius of an exploding vehicle is 12 meters. All characters inside the vehicle when it explodes are covered with burning gasoline.

Characters come in contact with open flames when moving

through a burning structure or a grass fire, usually to escape but perhaps to rescue a wounded companion.

The amount of burn damage caused is determined by the temperature of the flame and the length of exposure.

Temperature: Thermite and white phosphorus cause 2D6 damage per *second* in contact with a body part. Burning gasoline causes 1D6 damage per *second* in contact with a body part. Moving through a burning structure causes 1D6 damage per *phase* per body part in proximity to the flame. This is summarized on the Burn Damage Table on page 25.

Exposure Time: In the case of open fires, the exposure time is measured in terms of combat phases actually in close proximity to the fire. In the case of fuel or incendiary fragments, exposure time begins at the start of the combat phase immediately after the character was hit. Characters hit by burning fragments will instantly attempt to remove them. They will make one such attempt per *second* in the phase by making an average task roll against agility. Each successful attempt removes or extinguishes the fragment or fragments on one body part. The character suffers burn damage for the second in which he succeeds in extinguishing a flame.

For example, a character is hit by three burning fragments of white phosphorus, two on his arm and one on his leg. In the first second he fails to extinguish any fires and takes 4D6 damage to his arm and 2D6 damage to his leg. In the second second he brushes off the phosphorus on his arm but still takes 4D6 damage to the arm and 2D6 to the leg. In the third second he brushes the phosphorus from his leg and suffers 2D6 damage to the leg. His total damage has been 8D6 to his arm and 6D6 to his leg.

If a character suffers sufficient damage to lose consciousness partway through a phase (say after three or four seconds) he will remain conscious until the end of the phase.

Other characters may help extinguish the burning character, making one attempt per second of the phase in the same manner described above.

Protection: Any sort of helmet will protect the head against an open flame. Fuel and incendiary fires will burn through the helmet, or their heat will be conducted through it after one turn. The helmet may be removed and discarded in one second without need for an Agility roll. Flak jackets and kevlar vests will protect characters against open flames. But fuel and incendiaries will catch fire if contacted by fuel or incendiaries.

Commentary

In the original system, the damage caused by a weapon declined drastically with range. Since armor penetration was proportional to damage, this was necessary to model the decrease in penetration over range. It is no longer necessary since penetration has been decoupled from damage, at least for most heavy weapons.

Some will argue with this new system and suggest that damage should fall off with declining energy. While damage does decline with the drop in projectile energy, I don't believe that it's anywhere near as dramatic as the original system suggested, and in fact is probably not worth dealing with. A typical small arms cartridge fired at the ranges given in the game is going to do just about as much damage at extreme range as at close. Provided that the bullet retains sufficient energy to penetrate the target and pass through it, the actual speed of passage is not very important unless it hits something solid, like bone (unless you still believe all the hydrostatic shock horror stories of the '70s). That sort of unusual situation I think is best handled by the random variation provided by the damage die rolls, not by an overly complicated mechanical system

that would probably not be that much more "accurate."

In particular, I am pleased with how much easier this version of the damage system is to implement, as it requires no mental multiplication of multiple die rolls.

Finally, we come to the burn rules. I don't know about you, but these always make me a little squeamish. I've tried to provide a little better modeling of what's going on in this sort of a situation without getting too gruesome. However, you can't really ignore this given the large number of incendiary things on the battlefield. In line with the general philosophy of this revision, I've tried to give a more naturalistic rule here that gives a feeling for what's actually happening, rather than the old system which tended to just spit out results.



EXPLOSIONS

Many types of ammunition do damage solely by virtue of their kinetic energy—that is, they slam into the target and damage it by sheer brute force. All small arms fall into this category, as do many antitank rounds.

Other types of ammunition, however, explode when they hit, and this section describes their effects.

Descriptive Terms: The power of an explosion is described by two ratings: concussion and burst. Concussion is the effect of the massive overpressure wave generated by the explosion, while the burst radius is the area filled with small, high-energy fragments, often called shrapnel. These jagged metal fragments can cause injury, but they lose energy quickly due to their eccentric ballistic shape and thus do not carry anywhere near as far as a bullet.

Concussion: Concussion can affect part or all of the body, so the number of concussion damage dice called for are rolled and divided evenly among the various body parts. Simply divide the total damage suffered by seven and add that many points to each body part. All points left over which are not evenly divisible by seven are added to body parts as instructed by the referee. At least one of the extra points should be to the head and the remainder distributed on the side facing the explosion or in any previously injured part.

The listed concussion value for an explosion is the number of damage dice rolled if in physical contact with the explosion. If within the same eight-meter grid square as the explosion, it does half this concussion, rounding fractions down. If in an adjacent grid square, it does half of this value, rounded down, and so on until the concussion is reduced to zero. The following example shows the reduction of concussion damage as successive ranges for an explosion with a concussion value of 30.

CONCUSSION TABLE	
Range	Concussion
Contact	30
Same square	15
1 square	7
2 squares	3
3 squares	1
4 squares	None

Cover: Characters completely behind solid cover—such as behind a thick wall, completely inside a trench or foxhole, or inside an armored vehicle—do not suffer the effects of concussion. Characters under partial cover—such as partially exposed behind a wall, in a foxhole, or in the hatch of an armored vehicle—and prone characters, halve the concussion value of any attack on them. (This does not apply to explosions which are in physical contact with them, such as grenades dropped into their trench.)

Fragmentation: The burst rating for an explosion is its primary fragmentation radius, the area saturated with a high density of fragments. The secondary burst radius, which has a lower concentration of fragments, is twice this. Primary and secondary burst radii are expressed in meters, but are stepped in increments usable with the tactical grid system. Explosions with a burst rating of four meters, for example, include the impact square in the primary burst radius and the surrounding adjacent squares in the secondary burst radius. Explosions with a burst rating of 12 meters include the impact square and all adjacent squares in the primary burst radius and the next two squares out in the secondary burst radius, and so on.

Hit Procedure: Roll 1D10 for each character within either the

primary or secondary burst radius of an explosion. Characters within the primary burst radius are hit by multiple fragments on a roll of 1-3, a single fragment on a roll of 4-6, and no fragments on a roll of 7-10. Characters in the secondary burst radius are hit by multiple fragments on a roll of 1-2, a single fragment on a roll of 3-4, and no fragments on a roll of 5-10. If a character is hit by multiple fragments, roll 1D6 to determine the number.

Damage and Penetration: Fragments do damage as small arms fire. Fragments closer to the explosion are more dangerous than those further away. Fragments in the primary burst area do 2D6 damage and expend one damage die per AV struck (thus, they may penetrate AV1 and still do 1D6 damage). Fragments in the secondary burst area do 1D6 damage and will not penetrate armor.

All hit, damage, and penetration information is summarized on the Fragmentation Attack Table on page 25.

Penetration: All exploding rounds have a listed penetration value expressed as the minimum AV penetration. The actual penetration of the round is the listed penetration plus a 2D6 roll. Compare this to the armor value of the target vehicle and consult the Vehicle Combat Damage Tables on page 26. (See the vehicle damage rule on page 42 for details.)

WOUND EFFECTS

A variety of effects result from wounds, some temporary and some more lasting.

Knockdown: If a character suffers more points of damage in an action *phase* than his current agility, he is knocked down and may not conduct any other action for the rest of the current *turn*. Concussion damage counts the same as both 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 stature, he is unaffected.

If the result is greater than his stature, he is stunned and remains unconscious for a number of combat turns equal to the amount by which the total exceeded his stature.

For example, a character suffers a damage level 6 wound to the head and rolls a 5, for a total of 11. His stature is 9. He is stunned (unconscious) for two turns.

Wound Severity: The three levels of wound severity are slight, serious, and critical. If one of a character's body parts has taken damage less than or equal to its hit capacity, it is slightly wounded. If it has taken more damage than its hit capacity, but less than or equal to twice its capacity, it is seriously wounded. If it has taken damage in excess of twice its hit capacity, it is critically wounded.

Slight Wounds: A slight wound causes an immediate one-factor reduction in the character's initiative rating of 1. A character never suffers more than one initiative reduction for slight wounds, regardless of how many he suffers. Slight wounds have no other effect on combat, although the referee may wish 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 final strength down) and causes an additional immediate two-factor reduction to the character's initiative rating. Characters whose initiative ratings are reduced to 0 or less may not take any further actions during this combat phase.

A character who suffers a serious injury must make a percentage

roll against his Constitution to avoid losing consciousness. This roll must be repeated every combat turn in which the player attempts to conduct any activity.

A serious injury to the head automatically causes loss of consciousness. An unconscious character makes a percentage roll against his Constitution at the start of each combat turn to regain consciousness.

Finally, a serious wound to the leg or arm causes the character to lose the use of that limb until it is healed.

Critical Wounds: A critical head injury causes immediate death. Critical injuries to other body parts cause immediate loss of consciousness and require medical attention within 10 minutes or the character will die from loss of blood.

A character who loses consciousness due to a critical wound makes a percentage roll against his Constitution at the start of every other combat turn to regain consciousness. Once he regains consciousness, his strength is halved, and his initiative is reduced by three. Characters whose initiative ratings are reduced to zero or less may not take any further actions during this combat.

Wounded NPCs: It is neither necessary nor desirable to keep rigorous records on the number and location of all hits on every NPC. As a result, a simplified wound system is used.

All NPCs have the same hit capacity: 20. The referee is provided with NPC record forms from pages 16-18 (and you are given permission to photocopy them for your own game use). The forms have two rows of 10 boxes each labeled "wounds." As soon as the NPC takes any hits in the first row, he is slightly wounded and suffers a -1 initiative penalty.

As soon as the first row of boxes is full and he takes one or more hits in the second row, he is seriously wounded. He suffers an additional -2 initiative penalty, and his strength is reduced by half (round final strength down). As soon as the second row of boxes is filled and he takes one or more additional hits, he is either dead or unconscious (but in either case is no longer a threat).

Whenever an NPC is hit by fire, roll hit location normally. If a head hit is scored, all damage is doubled. Otherwise, hit location is used only to determine if the bullet hit a body part protected by cover or armor.

Commentary

Very little about the wound effects rule has changed aside from a simplified wound system for NPCs. In retrospect I think that it is a mistake to require the referee to roll up the number of hits an NPC can take when the NPCs come in groups of 10 or more. A person is a person, after all, and a great deal of detail lavished on spear-carrier NPCs just slows up the game for the players.

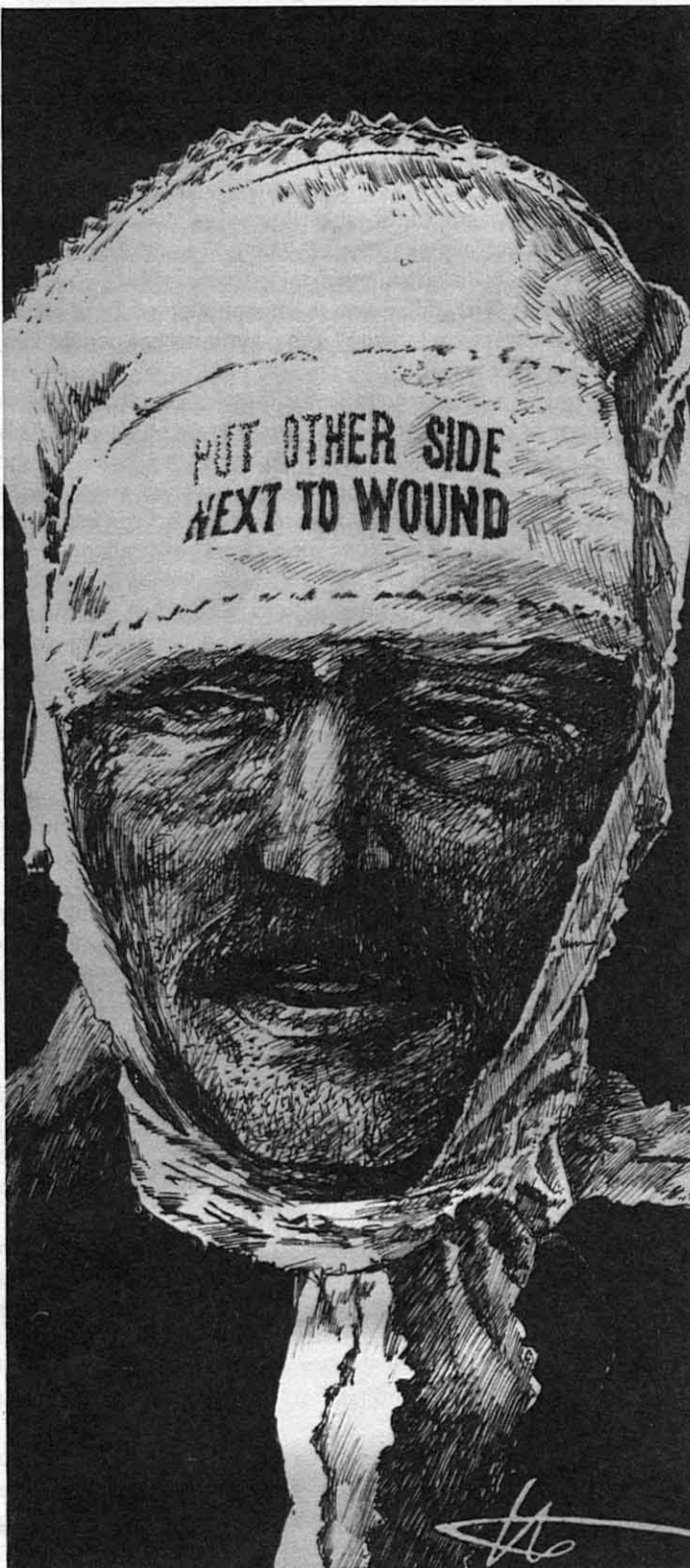
In the original rules for explosions I cut a few corners to make play of the game easier. While some of these were useful shortcuts, others had unfortunate results which I have tried to weed out with these revisions.

The principal difference in explosions is that concussion has been substituted for knock down radius. It is still possible to be knocked down, but it is also now possible to be blown apart by a large explosion, which was not the case before unless the character was actually in physical contact with the explosion. That all-or-nothing aspect of explosions was not very satisfying.

Also, high-explosive rounds from light autocannon which did not penetrate body armor did relatively little damage (knocked the character down and caused a fragmentation attack). Now the actual concussion of the explosion injures the target, which is as it should be.

I think the addition of concussion in place of knock down has been accomplished with very little increase in complexity because it is also useful in the demolition rules.

Fragmentation has been changed a bit, mostly to bring it in line with the new small arms damage and penetration procedures. I think the best thing about the fragmentation rules is the inclusion of a summary table in the combat charts; having to scan through the rules to find the hit chances, damage, and penetration each time a round detonated was a real pain in the backside.



VEHICLE DAMAGE

Because vehicles have a wide variety of armor in different locations and have unique gross configurations, each vehicle has its own armor ratings for surface locations, and several vehicle hit location charts are provided.

Vehicle Configuration: The Vehicle Description Chart (page 26) lists each vehicle's configuration. The three configurations are standard, turreted, and crew in hull.

Standard: Standard configuration vehicles have no turrets and are roughly rectangular in shape. Passenger cars are standard configuration, as are trucks and some armored vehicles, notably the M113.

Turreted: Turreted vehicles have a relatively prominent turret on top of the hull which contains the vehicle's main gun, and from one to three crewmembers. Most tanks and many APCs are turreted.

Crew In Hull: Crew in hull vehicles combine a fairly standard hull with an extremely small turret, which is usually unmanned. In some cases a large vehicle with a small, manned turret (such as the Soviet BTR-70) is included in this category as well.

Penetration: First, determine the penetration of the weapon. This is done differently for small arms, large-caliber penetrators, and exploding rounds.

Small Arms: Small arms have a penetration rating which indicates the number of dice expended per armor level penetrated. This rating generally varies with range, as explained in the wound section (page 40). For attacks on vehicles, however, simply divide the number of damage dice by the correct penetration value and round down. The result is the weapon's final penetration.

Large-Caliber Penetrators: All API (armor-piercing incendiary), APFSDS (armor-piercing, fin-stabilized, discarding sabot) and APFSDSDU (armor-piercing, fin-stabilized, discarding sabot depleted uranium) rounds are large-caliber penetrators. These weapons each have either three or four different penetration values. If a weapon has three values, the first is for both close and medium range, the second for long, and the third for extreme. If a weapon has four values, they are for close, medium, long, and extreme range, respectively. Roll 2D6 and add the total to the weapon's penetration rating. The result is the final penetration value.

Exploding Rounds: Rounds which explode always have only one penetration listed, which is either a number followed by the letter C (indicating that it is "constant" throughout its range) or the notation "nil." If the value is a number, roll 2D6 and add the total to the listed value, the result being the final penetration value. If the notation "nil" is present, the round has no final penetration effect.

Hit Location: Next, roll once per individual shot or burst and consult the column of the Vehicle Hit Location Chart (page 26) which corresponds to the vehicle's configuration. Add one to the die roll if the shot was from the side of the vehicle. The three possible results are turret, hull, and suspension.

Armor: Once the location is known, consult the vehicle description and note the armor value of that part. Hulls and turrets each have a front, side, and rear armor value. Tracked suspensions have one armor value which is used when hit from all angles. Wheeled suspensions do not have an armor value but do have a critical damage value, which is listed in parentheses to differentiate it from armor values.

Extent of Damage: Subtract the correct armor value of the target from the final penetration of the gun and consult the Vehicle Damage Resolution Chart (page 26). If the result is zero or a negative number, the shot had no effect. If it is a positive number,

read the result from the chart, which will be from one to three damage results, either minor or major.

Damage Implementation: Locate the damage table corresponding to the target vehicle's configuration. Find the correct section (minor or major damage, hull or turret damage) and roll 1D6 once for each required damage result. The following results are possible:

One Crewman: If this is a turret hit, it is from the turret crew; if this is a hull hit, it is from the hull crew. Which crewman is hit is determined randomly. The crewmember suffers 1D6 hits, each of which does 1D6 damage. Determine hit location separately for each hit.

Two Crewmen: Exactly as above, but two crewmen are hit. They are selected randomly from the entire vehicle crew, not just those in the hull or turret.

Two Passengers: Two passengers are selected at random and are hit exactly as noted above. If this is not a passenger-carrying vehicle, then treat this as a one crewman hit. If this is a passenger-carrying vehicle but no passengers are present, this becomes no effect.

Sight/Vision: Either the gun sight, range finder, or night vision equipment is damaged. (The referee will determine which.)

Traverse: The turret traverse is jammed, and the turret will no longer turn. This makes it impossible to fire any fixed weapon (such as the main gun or coax) in the turret until it is unjammed. Repairing the traverse is an average task using MEC skill. It takes a half-hour and cannot be done from inside the vehicle.

Secondary: One machinegun or grenade launcher is destroyed.

Loader: Either the human loader is hit, as for a crew hit above, or the vehicle's autoloader is destroyed.

Radio: The vehicle's radio is destroyed.

Main Armament: The vehicle's main armament is damaged and can no longer fire.

Ammo: The ammunition storage of the vehicle has been hit. The amount by which the final penetration exceeded the vehicle's armor is the percentage of stored ammunition lost (round fractions up). If the vehicle is armed with any exploding rounds or large-caliber gun rounds, the amount is also the percentage chance that the ammunition will explode. If the ammunition explodes the vehicle is destroyed, and the crew is killed.

Engine: The engine is hit and rendered inoperable. The vehicle may not move.

Fuel: The fuel tank of the vehicle has been hit. The amount by which the final penetration exceeded the vehicle's armor is the percentage of fuel capacity lost. It is also the percentage chance that the fuel will ignite. If the fuel ignites, the vehicle catches fire, and the crew must immediately bail out.

Other Results: Note also that some rolled results convert the damage into a different type. For example, if a minor turret hit is achieved against a turreted vehicle but a 6 is rolled on the damage table, the hit is converted into a major turret hit. In this case, roll again on the Major Turret Table (page 26). If a 6 is rolled on this table, the damage is converted to a minor hull hit. If a 6 is then rolled on the Minor Hull Hit Table, it is converted to a major hull hit. There is no possibility of any alteration to a major hull hit.

Suspension Hits: No damage tables are provided for suspension hits. One minor damage result to a vehicle's suspension halves its movement. A second minor damage, or any major damage, immobilizes the vehicle.

Tracked vehicles are treated like any armored part of the vehicle using the armor rating listed. Wheeled suspensions do not have an armor value, but instead have a critical damage level. Each time

a weapon hits the suspension it inflicts damage equal to its final penetration. Once the cumulative damage reaches the critical damage level, the suspension suffers minor damage. Once it reaches twice that level, it suffers major damage. (In most cases, any hit on a wheeled suspension will immobilize the vehicle. Only in the case of small arms fire is the cumulative damage likely to be important.)

Overhead Attacks: Tank breaker missiles may be programmed to fly over the target and attack it from above, and all ICM direct hits are overhead attacks. For overhead hit location, never add one to the die roll for a side shot—treat all suspension hits as hull hits instead. All attacks are resolved using the vehicle's side armor value.

Unarmored Vehicles: Unarmored vehicles have a slight armor protection provided by their metal bodies, but this is an incomplete cover. Whenever a shot hits an unarmored vehicle, there is a 50-percent chance of the shot hitting metal, and a 50-percent chance of it going through the windows or canvas cargo covers. If it hits metal, the shot is resolved normally, and the vehicle receives the benefit of its armor. If it goes through the window or cargo area, the shot is always resolved as minor damage, and any damage result is ignored except for crew or passenger/cargo hits.

SPECIAL WEAPONS

Shotguns: Shotguns may fire either slugs or buckshot rounds. Slugs are fired in the same way as any other small arms fire using the ratings provided on the small arms chart for the weapon. If the shotgun fires buckshot, however, several special rules apply.

Buckshot may only be fired at close and medium range; it may not be fired at long or extreme range.

At close range, each shot is treated as a normal single shot, but it does 9D6 damage. (For an explanation of damage, see the following rules.) At medium range, each shot is treated as a 10-round burst of automatic fire (and reduced immediately to seven dice for being at medium range). Each round which hits does 1D6 damage.

Note that a CAW is a shotgun capable of automatic fire. At close range it rolls 5D6 for hits (as modified by recoil and possibly range, if any factor such as target movement causes it to be treated as at a longer range), with each roll of 6 hitting and each hit causing 9D6 damage. At medium range calculate the number of dice normally rolled for a five-round burst (subtracting two immediately for being at medium range). After all reductions are made, multiply the remaining number by 10 to determine the number of D6 rolled for hits. Each hit does 1D6 damage.

Buckshot has a penetration of "nil" at all ranges.

Antitank Missiles: Several guided antitank missiles are available to PCs. Unlike other direct-fire weapons, the range given for an antitank missile is its maximum range. Within this range, the chance to hit is the same regardless of distance: twice the firer's HW skill. The character must aim before firing, and (except for tank breaker) must continue to aim during the entire flight of the missile or it will miss the target. All missiles travel 1000 meters per combat phase.

If the character is hit by any sort of attack, he will stop aiming, and the missile will miss.

Tank Breaker: Tank breaker is a fire-and-forget antitank missile—that is, once it is aimed and launched, it will continue to home in on the target without further guidance from the operator. The firing character must still aim before firing, but once the missile is fired he need not continue to aim.

Multiple-Barrelled Guns: The M-988 has a twin-barrelled

40mm gun system, while the ZSU-30-6 has a six-barrelled Gatling gun. In both cases, resolve all steps of the firing procedure as if they were single-barrelled guns. When the total number of hits has been determined, however, multiply by the number of barrels (two for the M-988 and six for the ZSU-30-6).

Commentary

The vehicle damage system has been considerably streamlined, as is readily apparent. The old system, while presenting an interesting view of the interior ballistics of a round once it entered a vehicle, was very cumbersome and time consuming. I had thought that, since vehicles were fairly rare, players would want to know exactly what happened to theirs. That does not seem to be the case, however, or at least not to the extent the first system made possible.

The revised system still has a fairly detailed tally of interior components damaged, but there are fewer die rolls and fewer chart entries to page through. I think the individual vehicle information is more clearly presented as well. My aim here was to keep the detailed flavor of the original system while making the mechanics far more streamlined and accessible.

One important statistical change has been the armor ratings. In the original game each armor point was the equivalent of one millimeter of steel, while it has now become five millimeters of steel. This accounts for some of the changes in armor values of the vehicles, while others are from new data which has been released in the six years since the original publication of the game.

Finally, players will note that even unarmored vehicles have an armor value of one representing the sheet metal and structural members that make up the vehicle body, which will stop most pistol bullets and slow up some rifle bullets pretty well also.





SPECIAL VEHICLE ARMOR

The two types of special vehicle armor are spaced and compound. Spaced armor is marked on the vehicle chart by the notation "Sp" after the armor value, while compound armor is marked with the notation "Cp." Both spaced and compound armor are treated as normal for all purposes except for hits by exploding shells.

Spaced Armor: When spaced armor is hit by an exploding shell, the final penetration of the round is its listed penetration plus 1D6, not 2D6.

Compound Armor: When compound armor is hit by an exploding shell, the final penetration is half of the listed penetration (round fractions down) plus 1D6.

DEMOLITIONS

Explosives, in addition to providing the bang for high-explosive rounds, are used to demolish structures and breach barriers.

Types of Explosives: For simplicity, the game deals only with the two most common types of explosives—dynamite and plastique explosive.

The units used in the game are the quarter-kilogram stick of dynamite and the one-kilogram block of plastique explosive. All demolition effects are resolved in terms of the number of demolition points (DP) used. A stick of dynamite has one DP; a block of plastique explosive has six DPs. Plastique explosive is flexible, and may be molded to any shape desired or broken into smaller charges of one or more demolition points. Several sticks of dynamite and/or blocks of plastique explosive may be joined to form larger charges.

Setting Charges: Each demolition charge takes 15 minutes (that's 30 turns) to emplace. A demolition charge is defined as one or more sticks of dynamite and/or blocks of plastique explosive connected to each other, up to a maximum weight of 10 kilograms. Additional explosives may be attached as extra charges, but require additional time to emplace. If several larger charges are emplaced, several characters may work on emplacing them at once.

Since setting a charge requires fuses and detonators, a character must have a demolition kit to do so.

Setting a charge is an Easy task using CBE skill. Task failure indicates that the charge does not go off when triggered, and catastrophic failure indicates that the charge goes off while being set.

Tamping: Tamping consists of covering a charge so that the force of the explosion is contained and directed in toward the structure. Tamping must be done with dense or heavy material, such as rocks, sandbags, steel plates, etc. Tamping adds five minutes to the time required to set the charge. The referee may increase this time requirement for difficult tamping jobs. (It is very difficult, for example, to tamp a charge taped to the side of a free-standing girder.)

Effects: Like anything which blows up, explosives have a concussion, burst, and penetration value. To determine the concussion of a charge, consult the Demolition Table provided with the referee charts (page 28). This lists demolition points and the corresponding concussions.

Concussion: It requires progressively larger quantities of explosives to produce a linear increase in concussion. To determine the concussion of a charge, consult the Demolition Table provided with the referee charts (page 28). This lists demolition points and the corresponding concussions. In reading the chart, you will notice that there are several gaps in the listing of demolition points.

The DP value listed for a given concussion is the minimum number of DPs required to achieve that value.

If more precise results are desired, the following formulae can be used to calculate the concussion value of a given demolition charge and the size of charge needed to achieve a given concussion.

To determine the concussion of a charge, divide the DP value of the charge by two, extract the square root of the result, and multiply by five. To determine the number of demolition points needed to achieve a given concussion, divide the concussion by five, square the result, and multiply that result by two.

Burst: Once the concussion of the explosion has been calculated, determine the maximum concussion radius of the explosion in the same manner as for a high-explosive round, as is described above. This maximum radius of concussion is also the primary burst radius of the explosion. The secondary burst radius is twice this.

Unlike a high-explosive artillery round, a demolition charge does not contain the material necessary to produce a large quantity of fragments, but these are usually produced by the destruction of the object being demolished. If the demolition charge is simply lying on the ground, or is used to demolish an earthen or timber and earth fieldwork, it does not produce fragments.

Penetration: The base penetration of a demolition charge is the same as its concussion value, but is modified by its means of emplacement. If the charge is tamped, its penetration is doubled. If the charge is simply lying on top of or leaning against a structure (as in the case of a thrown satchel charge or stick of dynamite), its penetration is halved. Unlike other explosions, the listed penetration value of a demolition charge is its actual penetration; players do not add the roll of 2D6 to it.

Breaching Barriers: Breaching a barrier basically means blowing a hole in it. Demolition charges can be used to breach walls, armor plate, embankments, etc.

To determine the size of the breach made by a demolition charge, first determine its maximum penetration. To do so, divide the penetration value of the charge by the armor value constant of the material of the barrier. This constant is listed on the Armor Equivalent Table. The result is the number of millimeters penetrated by the charge.

For example, a charge with a penetration of 8 would penetrate (8/0.2) 40 millimeters of armor plate, (8/.03) 267 millimeters of brick or concrete, and (8/.02) 400 millimeters of stone, packed dirt, or wood.

Now determine the actual diameter of the breach made. The diameter of the breach, in millimeters, is the penetration (in millimeters) of the charge minus the thickness (in millimeters) of the barrier.

For example, suppose a character wishes to breach a 500-millimeter-thick (half-yard-thick) reinforced concrete wall. The character is using nine one-kilogram blocks of plastique explosive (with a total of 54 DP). Consulting the Demolition Table (page 28) he uses the 50 row for DPs and notes that this has a penetration of 25. He spends an extra five minutes carefully placing and tamping the charge for maximum effect, thus doubling the penetration to 50.

He divides the penetration value of 50 by the reinforced concrete's armor value constant of .04, obtaining a total penetration of 1250 millimeters. Subtracting the thickness of the wall from this leaves a hole 750 millimeters (three-fourths of a meter, or over two feet) across.

Characters should take cover from the blast as an explosion with

a concussion value of 25 will injure characters within five grid squares (36 meters) of the explosion, and it will throw concrete shards to twice this distance.

Commentary

The demolition rules are another area of important modification. The original rules for breaching a barrier provided for a linear increase in penetration for a linear increase in explosives. There was a sort of simple geometric progression for burst and knock down radius which worked okay, but barrier breaching was seriously distorted, especially as the size of the barrier increased.

While I was aware of the geometrically increasing requirement for explosives to breach a linear increase in barrier thickness, I decided to spare you the pain of working square roots to figure out how much explosive was needed to get the job done. I'm still concerned about that, but now I figure that the inclusion of the Demolitions Table showing how much bang is needed for a number of sample barriers will get you through most situations, and the real purists can use the two equations provided to find exact data.

Even with the new rules, players and referees should remember that these are only very rough approximations of reality. They aren't rigorous enough that worrying about exact charge weights is all that important. The penetration formulae I've used are derived from the army rough rule of thumb for cutting high-carbon steel, namely: $P=D^2$.

P stands for the pounds of TNT required, and D stands for the diameter, or thickness, of the steel beam to be cut, expressed in inches. The formulas I've given merely convert these constants to the units of measure used in the game, namely armor value and demolition points. Actually, an entirely different formula is used for breaching masonry, concrete, and stone. The equivalent hardnesses given in the game are only averages, as the hardness per millimeter of most of these materials actually varies with the thickness. For example, 1.5 to 2.5 feet of reinforced concrete have about the relative hardness listed in the game. One foot or less, however, has almost twice the hardness per foot, while seven feet or more have only half the hardness per foot. I never even contemplated adding this complication to the demolition rules because, when you get right down to it, who cares?



IMPROVED CONVENTIONAL MUNITIONS (ICM)

Improved conventional munitions are artillery rounds filled with grenades. The rounds burst at a high altitude and scatter grenades throughout their listed burst radius.

In the case of conventional ICM rounds, these are high-explosive/fragmentation grenades. In the case of ICMDP (dual purpose) they are HEAT grenades capable of penetrating the roofs of armored vehicles.

When a character or vehicle is in the burst zone of an ICM or ICMDP round, consult the ICM Attack Table (page 25). The column labeled Close is the decimal chance of a grenade landing in the same grid square as a character or vehicle—i.e., the number shown or less must be rolled in 1D10 to achieve the indicated result. (Roll once per grid square containing one or more characters or vehicles, not once per character or vehicle in the square.)

The column which is labeled Adj is the chance of a grenade landing in the adjacent grid square. The Con, Burst, and Pen columns list the concussion, burst, and penetration values for the individual grenades in a round.

The Direct-Hit Chance Table (page 25) indicates the chance of a direct hit on a character or vehicle in the grid square. This table is rolled on only if it has already been determined that a grenade landed in the same grid square.

Roll once for each character and vehicle in the square. If more than one hit is achieved, then the referee should randomly determine which of the characters or vehicles actually suffered the hit.

All direct hits on vehicles are resolved in the same manner as overhead attacks.

MINES

Mines are placed in the ground and detonated when a man or vehicle passes over them. Antitank mines are detonated only by the pressure of a vehicle.

Detonation: Minefields are always described in terms of their width and depth in eight-meter tactical grid squares, and their density of mines per grid square.

Once this has been determined, the chance of detonating a mine per grid square entered is determined. For personnel, multiply the density by 0.1; for vehicles, multiply the density by 0.5. The result is the chance per square that a vehicle or character will trigger a mine.

It is too time-consuming to roll for every square entered, so the referee should instead note how many squares of the minefield a character or vehicle moved through, multiply this by the detonation chance, and use the result as the chance that a mine was triggered at some point during the move.

Since a good many variables are actually at work here other than simple density of the field and distance travelled, the referee is strongly encouraged to make a quick approximation of the chances, round to the nearest 10 percent (but never down to 0 or up to 100), and roll a few 10-sided dice. This is not an absolutely precise system to begin with, so speed of resolution is more important than precision.

For example, the referee determines that three characters are walking through an antipersonnel minefield with a density of 0.4 mines per square. One character walks through six squares of the field; one walks through five; and one walks through two. The chance of detonation is 0.04 per square moved through. The referee decides that they have walked through an average of about four squares each, for a detonation chance of 0.16 (16 percent) each. He decides to roll two dice for one or two characters, and one

die for a one (for the fellow who only crossed a small part of the field). If one of the two dice for one or two characters triggered a mine, he would roll a die to decide which character triggered it.

Damage: Detonation of a mine has the same effect as any other explosion, causing concussion and fragmentation. However, if a character triggers an antipersonnel mine, the full concussion value of the mine is only suffered by one leg (determine which randomly), with the rest of the body parts suffering half concussion. Damage to a vehicle is resolved against the vehicle's suspension. If the mine has a penetration value, then an additional attack is made against the hull of the vehicle using the vehicle's hull rear armor value.

Detection: Detection of a minefield is an Easy task using either CBE or RCN skill, but may only be attempted while crawling or walking, not while trotting or running, or while mounted.

Detection of a camouflaged minefield is an Average task, subject to the same restrictions. Conditions of reduced visibility (fog, night, smoke, etc.) raise the difficulty of the task by one level.

Marking And Removal: Once a minefield is discovered (either by detection or by setting off a mine) characters may either probe for the mines and mark their location or may attempt to remove them.

Probing and marking mines is an Easy task using CBE or an Average task using RCN. Failure of the task indicates that a mine present in the grid square has been missed, while catastrophic failure indicates the accidental detonation of a mine. It takes five minutes (10 combat turns) to probe and mark a four-meter-wide path through one tactical grid square (eight meters).

If players wish to remove the mines from a field, they must first probe and mark the field as explained above. The referee will determine where the actual mines are in the marked part of the field, and each one must be removed. Removing a mine takes 10 minutes (20 combat turns) and an Average task using CBE or a Difficult task using RCN.

A result of failure indicates that a complication in the removal will take extra time. Spend a second 10 minutes and roll again.

A result of catastrophic failure indicates accidental detonation of the mine.

Claymores: The Claymore mine is a directional antipersonnel mine. It is not buried, but instead is generally emplaced at or near ground level and detonated either by remote control or a 30-meter trip wire. Personnel passing over the trip wire have a 60-percent chance of detonating the mine.

Concussion is resolved normally. Fragmentation, however, is suffered only in the direction of the blast (pre-determined when the mine is emplaced). The burst area is a 30-degree cone, which means that at any given distance from the mine, the cone is half that distance wide.

For example, at a distance of 50 meters, the cone is 25 meters wide; at a distance of 100 meters, it is 50 meters wide.

The primary burst zone of the Claymore extends to 50 meters, while the secondary burst zone extends to 100 meters.

FASCAM: Field artillery scatterable mines (FASCAM) may be fired by US 155mm howitzers. The two types of FASCAM rounds are remote antiarmor mines (RAAM) and area denial artillery munitions (ADAM).

The first type delivers antitank mines, while the second delivers antipersonnel mines. Because the antipersonnel mines are smaller, ADAM rounds provide for a higher minefield density than do RAAM. The densities of the two types of fields are provided on the FASCAM Mine Density Table (page 25).

Due to the low density of mines delivered by a single round, it is common practice to fire more than one round to make a field. When emplacing a minefield using FASCAM, players will tell the referee how many rounds they are firing into each 30x30 grid square area (the area covered by the mines from one round). The density of the minefield is the density of one round times the number of rounds fired.

For example, each RAAM round provides a density of .01 mines per grid square. Suppose a group of player characters has 12 RAAM rounds and wants to mine an area roughly 500 meters across (60 grid squares). Each round covers an area 30 squares wide and 30 deep. The players tell the referee their characters will fire six rounds into the middle of the left half of the gap and six rounds to the right. This will give them a minefield 60 grid squares wide, 30 grid squares deep, and with a mine density of .06 per square.

Standard Minefields: As an aid to the referee, a standard antitank and a standard antipersonnel minefield already in place (i.e. laid previously by NPCs) are assumed to have a density of 0.1. The referee can increase or decrease this, and determine widths and depths to fit the situation. The 0.1 density is an easy rule of thumb to work from, however.

Commentary

The ICM rule is now a much more naturalistic rule than in the first edition of the game, and I hope it is a bit easier to understand. Instead of treating ICM rounds as one explosion with a very large burst radius, the rule now treats them as a number of relatively small explosions, which is exactly what they are. By also including better coverage of direct hit chances, I think that this is an all-around better treatment of the subject.

One thing which always surprises me is the seemingly low density of mines in actual minefields.

I suppose that my surprise is the product of too many Hollywood war movies in which minefields were always packed with the things. As I learn more about mine warfare, it begins to look as if most minefields are barriers more in the psychological sense than the physical.

It has often been claimed that the Red Army in World War II would routinely burn up a rifle regiment to clear a minefield. As near as I can tell, that is based on a misunderstanding of a statement by Marshal Zhukov to a U.S. officer immediately after the war. Zhukov, when asked how the Soviets dealt with minefields, answered that they attacked directly through them as if they weren't there.

Why?

Because, he said, they sustained fewer casualties doing so than in either attacking through the gaps in the field (which were invariably heavily covered by fire) or in waiting for a gap to be cleared (which allowed the Germans to bring up their reserves). Interestingly enough, this is almost identical to Patton's view on minefields.

So if minefields are more threatening from a psychological than from a real material sense, what is to prevent players from walking straight through them. Nothing, except the same thing that keeps anyone from doing so.

The statistics on minefield casualties may be "acceptable" to a battalion or regimental commander considering alternative courses of action, all of which will produce casualties. It may be somewhat less acceptable to someone who has a good chance of actually becoming a statistic.





ATTACK OF THE MOLE PEOPLE

The situation described can be located wherever coal is mined by deep shaft technology instead of strip mining. Local flavor can be added by changing the names and previous occupations of the NPCs to suit the chosen locale. The background history is given in terms of an American setting. But with a few select nomenclature modifications (changing a few personal names, replacing San Francisco with Lublin and Kentucky with Silesia, etc.) the adventure could be transferred to Poland.

Gas and dust explosions, common dangers in coal mines, are ignored in this adventure—they would complicate matters too much.

BACKGROUND

A village consisting of relocatees from the east—formed last year to reclaim farmland in the highlands—has effectively ceased to exist. People suddenly began vanishing from their houses; shelves full of supplies suddenly emptied; and animals disappeared from their pens. Mysterious sounds can be heard in the distance late at night, coming from no particular source. Strange figures are occasionally glimpsed in the distance, and odd odors hang over some remote hollows, almost as if something were perpetually on fire. The valley is a rich one; the soil is good; and the place is sheltered from the extremes of weather. It would make a good place to settle for a hard-working farmer—if it weren't haunted.

Of course, your patron doesn't believe in ghosts, werewolves, or "night haunts." Something funny is going on, and your job is to find out what.

APPROACH

The deserted village is falling apart, but not from neglect. Active looting has been taking place. Buildings have been systematically looted of their contents, and some show signs of deliberate dismantling, as if someone wanted the lumber and construction materials. One house has been carefully pulled apart, with the lumber stacked neatly in piles, as if awaiting for someone to haul it off.

Any character who investigates the area surrounding the village will find small, fenced-in plots planted in various crops—wheat, corn, various vegetables, and other food crops. Some of the fences are built of lumber salvaged from the houses in the village.

Day: Adam (leader of the Ianarian Church) has decreed that his followers must go into the outside world only at night, except in the most dire emergencies. So the chances of the PCs encountering anyone from the mine during the day are small. The mine has three major entrances, all of which have been camouflaged and are guarded day and night. In addition, it also has three smaller ventilation shafts, narrow conduits less than half a meter wide leading to various areas in the depths of the mine.

One of these is used as a chimney for the coal-burning boiler. PCs who inquire about anything odd should be told of the faint smell of something burning. Locating the source of this smell (the "chimney") is a task (AVG: RCN) and will consume the remaining hours of daylight.

Night: As soon as the sun sets, scouts from underground will come to the surface to reconnoiter. This team will consist of four Experienced NPCs armed with pistols and double-barrelled shotguns (the weapons will all be fully loaded, but the team will have no extra ammunition to reload them). The PCs will definitely encounter the scouting team sometime during the twilight hour at a distance of 1D10x10 meters. The referee should roll for spotting and surprise by both groups: Each group has a chance of spotting the other (AVG: RCN). The scouts from underground, being Experienced NPCs, have skill levels of 40 in RCN. The group that does not spot the other is surprised. If both groups spot each other neither is surprised, and a firefight will ensue, during which the scouts will fire once and flee for the mine entrance. If both groups are surprised, neither does anything for one turn, and then the firefight ensues. If the scouts achieve surprise over the PCs, one will remain to watch them while the other two return as quickly and silently as possible to the mine to sound the alarm.

The scouts, being religious fanatics, will provide no useful information if captured. PCs should make a percentile roll versus their Intelligence to notice that the scouts are covered with a faint, grimy coating of coal dust, indicating a mine nearby. It is strongly recommended that searching PCs discover one or two of the vent shafts before finding one of the entrances.

Alternative: An alternate approach is to have the PCs encounter an escaped slave shortly before they enter the valley. This slave (a Novice NPC) will be nearly exhausted. But he will be able to tell the group something about what is happening (to the extent that he understands) and lead the PCs to the ventilation shaft from which he made his escape. In

this scenario, the slave will be pursued by a scout team, as described above. Encountering the PCs will revitalize him, and he will demand that the PCs take him along in any raid on the valley. He has little knowledge of the mine, however, except for the area in and around the slave quarters.

MAP DESCRIPTION

The mine has three entrances, and four levels are currently occupied. The levels below are filled with water and are slowly being pumped out by slave labor. The interior of the mine is being fitted out as a home base for Adam and his followers (using material and supplies salvaged from the surface). From this base they will gradually repopulate the world. Until that time, however, they must continue to live in the mine, coming to the surface only to oversee the slaves.

A-E. Ventilation Shafts: These are narrow shafts excavated at varying intervals to provide fresh air for the mine and to exhaust spent air from it. Most of these have been hand-excavated by the Ianarian Church, and are faced on the inside with concrete or wood where necessary. They are large enough for one person (without a backpack) to climb down, taking five minutes for the trip. Ropes and climbing gear are not necessary as the shafts are relatively narrow and rough enough to provide hand holds. Shaft A is the "chimney" leading to the turbine/boiler room; shaft B is the shaft through which the escaped slave made his exit. The others lead to various chambers or shafts which may or may not be occupied.

F-H. Main Entrances: Each entrance is carefully concealed from outside observers. Each is covered by a machinegun team consisting of three Experienced NPCs with two pistols and a machinegun (M60, MAG, or RPK, at the referee's option). Each entrance has a small demolition charge planted near it, so the Children of the Ianarians can blast it shut if it appears that their defenses will be penetrated (they count on being able to escape through the other entrances or the ventilation shafts).

I. Chambers: The Children have excavated chambers to serve as living quarters for themselves. Each chamber is occupied by a single family of three to six members. If the PCs enter the shafts during the day, these chambers will be occupied. At night, they will not. The inhabitants are unarmed, in any case, but will give the alarm if they see strangers.

K. Tunnels: These are two meters in width and height, and are equipped with the rails of a small tramway (originally for transporting coal, now largely unused). Cables run along the top, with light bulbs every few feet.

L. Storerooms: These were excavated for

storage of food and equipment. Most of them are empty now. Each has a 10-percent chance of containing one person, who is not likely to be armed but will give the alarm if strangers are spotted. Storerooms are not lit, so the PCs will need some form of light or will have to proceed at one-quarter normal speed. Storeroom L1 serves as the armory, but the weapons will be distributed if the alarm has been sounded.

Slave Quarters: These chambers were excavated for housing slaves. They are lit only by fires in the braziers, which provide a little heat as well.

Guardrooms: These are small guardposts excavated into the walls of the mine shafts. They are primarily located near the entrance and near the slave quarters.

Adam's Quarters: This chamber is fitted out with several private rooms and serves as the quarters for Adam and his family.

Grand Hall: This is a naturally occurring cavity in the rock. The original excavators of the mine made use of it as an equipment store-room and switching complex for the miniature tramway used to haul coal from the depths. It now serves as a grand gathering hall for services, lectures, and so on.

Generator Room: This room contains the portable generator which provides power for the mine. It has a single operator, constantly on duty monitoring its condition.

Boiler/Turbine Room: This room contains the boiler and steam turbine which drives the generator in the next room. This room has a duty watch of five (two to watch the boiler and turbine, and three to watch the stokers) plus six slave stokers/coal haulers. The chimney goes from this room to the surface. The bottom of the chimney is fitted with a small electric fan which pumps the smoke up it, but this is only loosely held in place and could be kicked out by someone descending from the shaft.

UNDERGROUND CONDITIONS

Several factors should be considered when the PCs enter the mine.

General Conditions: In areas of complete darkness, characters without light cannot see and will have to feel their way along very slowly if they are to avoid walking into walls or stumbling over slight irregularities in the floor. Flashlights provide good illumination for about 10 meters (beyond that it becomes almost impossible to distinguish details). Another limitation of flashlights is that they throw very strong light along a narrow cone, but very poor light in other directions. Torches and candles provide good illumination for about eight meters and four meters, respectively, but the light is flickering and inconstant. Matches and cigarette lighters provide weak light for two meters for a short time (even lighters eventually become too hot to hold).

Referees should not neglect to exploit the effects of poor or flickering light. In such light, it is easy to imagine things. People may think immobile objects are moving, or may see things that are not there (a bundle of rags or a pile of rocks can look like a crouching man). There is a 50/50 chance that a given PC has a cigarette lighter. Every player character can

have a small supply of matches (20 to 30).

Time and Movement: PCs move at any speed they are capable of but run the risk of not being able to see. A character running in total darkness could slam into a wall or fall into a hole. A PC can feel his way cautiously along in total darkness at the rate of about one to two meters per round. With a torch, match, lighter, or candle, a character cannot go too fast for fear of extinguishing it and should not move faster than three to five meters per round. With a flashlight or in illuminated areas, normal movement can be maintained.

Sounds: The referee should not neglect the auditory aspects of being underground. Is that scrabbling sound the PCs hear a rat running away or some murderous psychopath sneaking up on them? Noises made by bats, rats or dripping water, echoes from the PCs' own voices, or the faint sounds made by others as they move about can be exploited to add to the rising crescendo of panic. Remember that noises propagated through a maze of tunnels can seem to come from all directions, and that auditory hallucinations are as possible as visual ones. For instance, if a person is listening intently and expects to hear footsteps, he may hear a faint sound (such as distant dripping water) as footsteps.

UNDERGROUND COMBAT

Melee and body combat are conducted according to the standard rules. Fire combat requires one or two special considerations.

Underground Fire Combat: The referee should limit the PCs to small arms and hand grenades underground. Any firearms used underground have a chance of hitting something by ricochet (except shotguns—the pellets bounce, but lose power so swiftly that they are unlikely to do damage). Certain hand grenades used underground may cause a cave-in. Also, gunfire or explosions in an enclosed area can be painfully loud (this last effect may be implemented by the referee if desired).

If the PCs fire their weapons in the underground mine, the bullets will ricochet. For every round from any firearm (other than a shotgun) that does not hit its target, roll 1D10. On a 10, the round hits another target (chosen at random among the people in the area).

THE IANARIANS

In 1968, Willard Kleindienst, a part-time clerk in an alternative bookstore in San Francisco, had a vision in which he was instructed to found a new church and prepare for the destruction of humanity. Kleindienst was ordered to rename himself Adam, and to transcribe a series of laws and regulations for the new society, which would be dictated to him in the form of dreams by a series of creatures calling themselves the Ianarians. Adam transcribed the dreams and circulated them among a small circle of friends, who formed the core membership of a group that would eventually name itself the Ianarian Church for the Keepers of the Revealed Wisdom. The Ianarians (Adam said) were inhabitants of deep space who had long ago left their corporeal selves to travel in time and space. Earth was headed the

way of so many primitive intelligences, the Ianarians told Adam, and he had been picked to receive instructions on how to save a small portion of humanity from the fate that would soon overtake its homeworld. The Ianarians had chosen him because he was particularly receptive to their telepathic signals, although his mind (being an earthman's) was too primitive to receive direct communication—he could only receive dreams and images.

The society had over 5000 members by 1976. But after a time the membership began to drift away, and by the 1980s the church had practically ceased to exist except for a small group of families in southeastern Kentucky (where Willard's family had some property) on a farm they had named "Time Station: Uerthe."

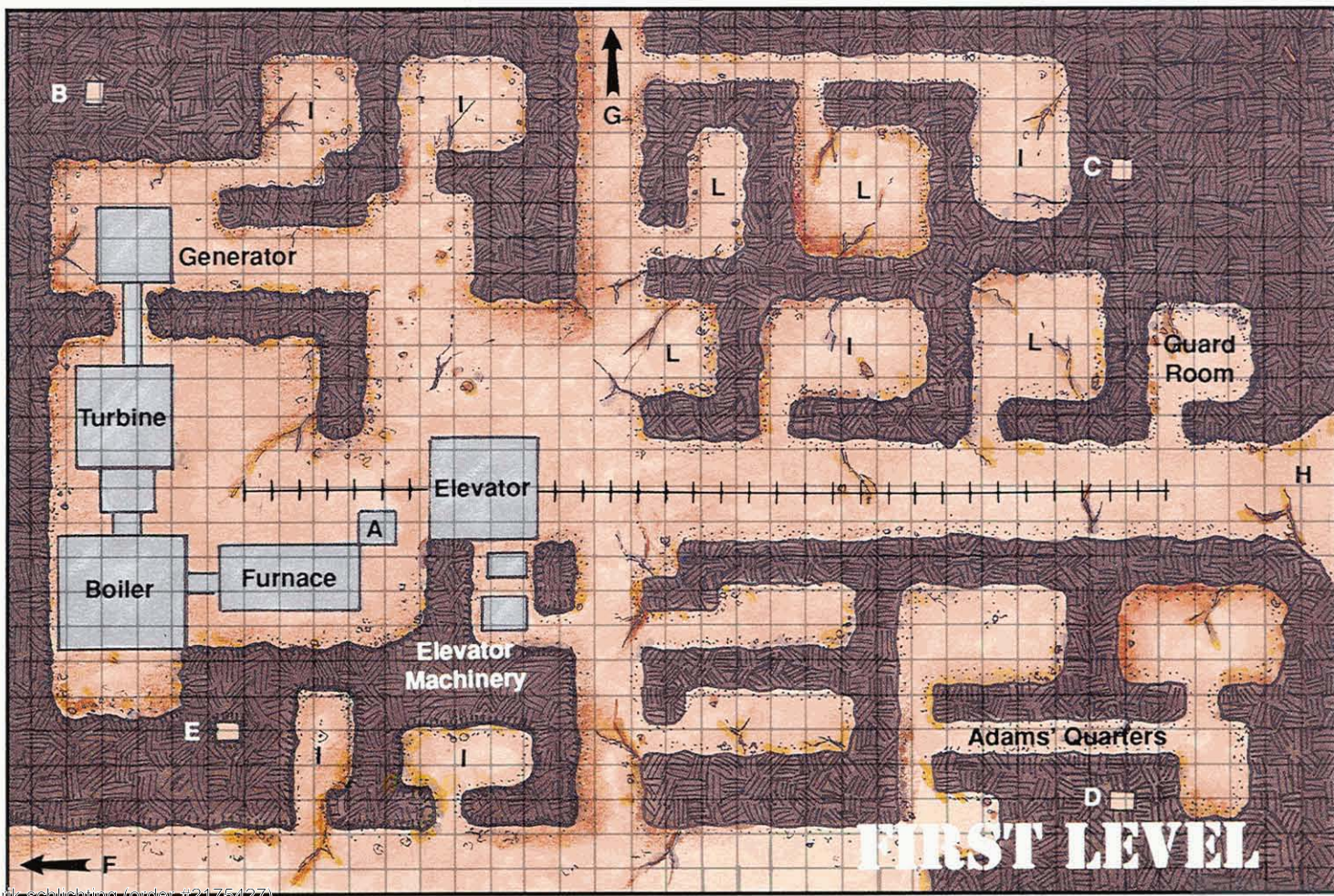
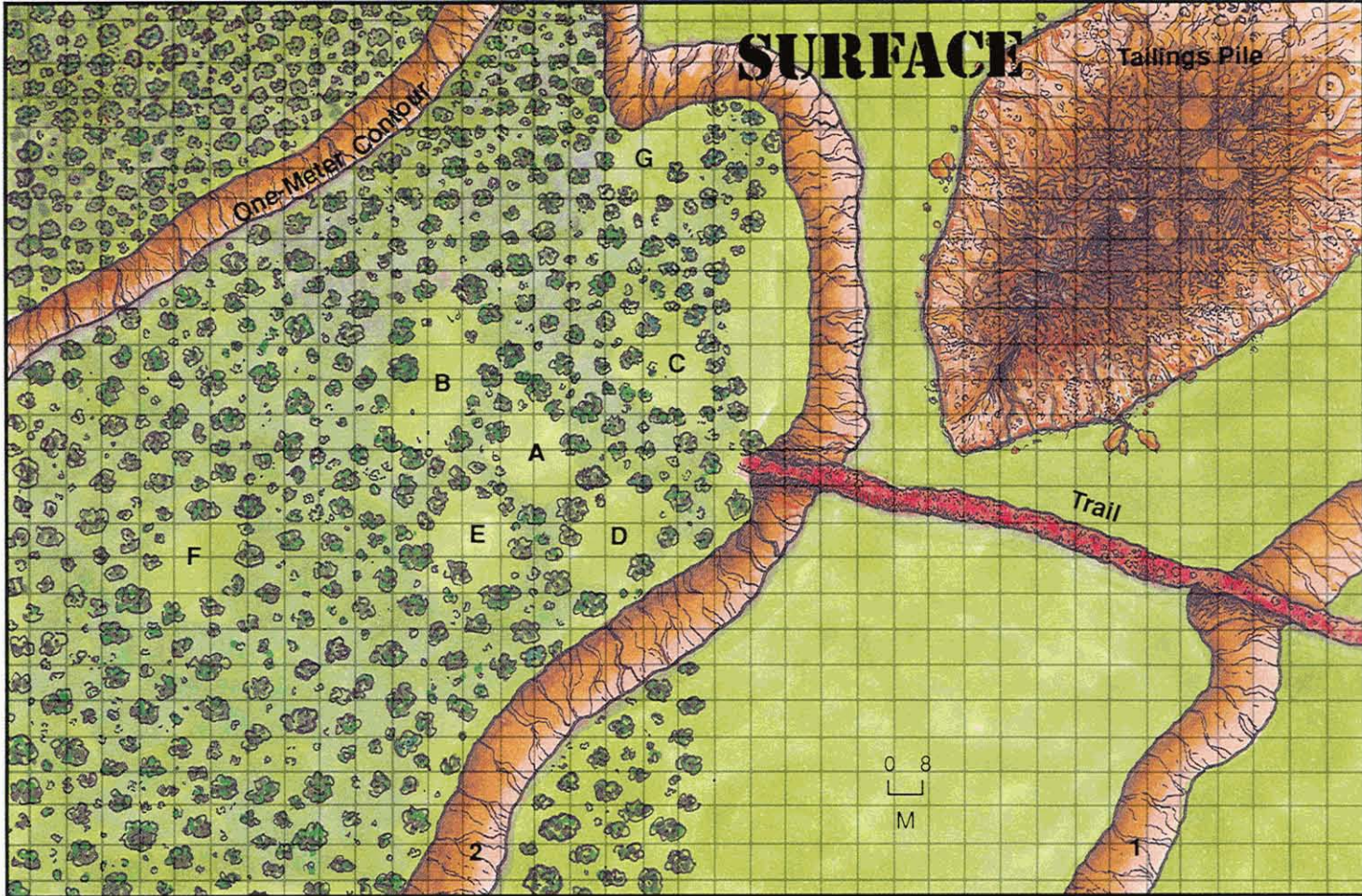
When the nuclear strikes on the United States began in late 1997, Adam received a new message from the Ianarians. The moment had come, he was told: The world was about to be destroyed, and he and his followers were to move to a place underground until the war had cleansed the world of its burden of evil. The group took its carefully hoarded supplies of food and weapons, and occupied an abandoned coal mine about 100 miles from the Kleindienst property.

For more than three years, they lived a cramped underground existence, mining a small amount of coal to power their boiler/turbine/electrical generator and give them a few electric lights. Water was no problem—the lower chambers of the mine were below the water table. A few months ago, with supplies of food running low, Adam announced the Ianarians had spoken to him again. It was now safe to go to the surface, he said. Furthermore, anyone on the surface was contaminated, physically and spiritually, by the war, and was inferior to the inhabitants of the mine. Adam told his people that they must continue to inhabit the mine but that they must begin growing food on the surface, using slaves taken from the subhumans now living there. To prevent premature discovery by the forces of evil, however, Adam decreed that his followers must go abroad only at night, returning to the safety of the mine shaft by day. Any slaves captured were also required to follow this rule.

Following Adam's instructions, the Children of Ianaria, as they call themselves, have been kidnapping surface dwellers for use as slave labor (mining coal for the turbine, pumping out the lower levels of the mine to make room for future generations, tending the crops) all under the watchful eyes of the church.

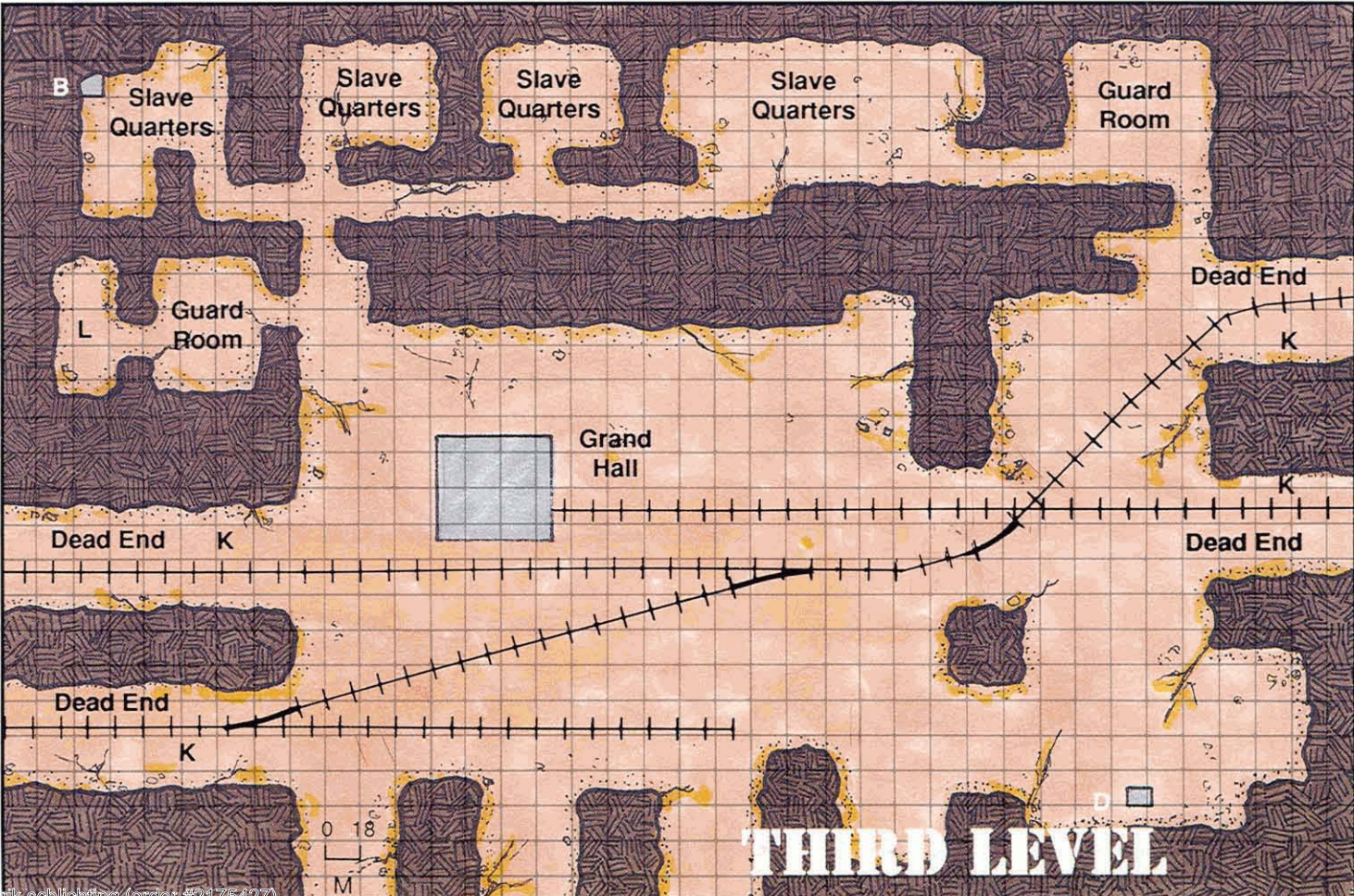
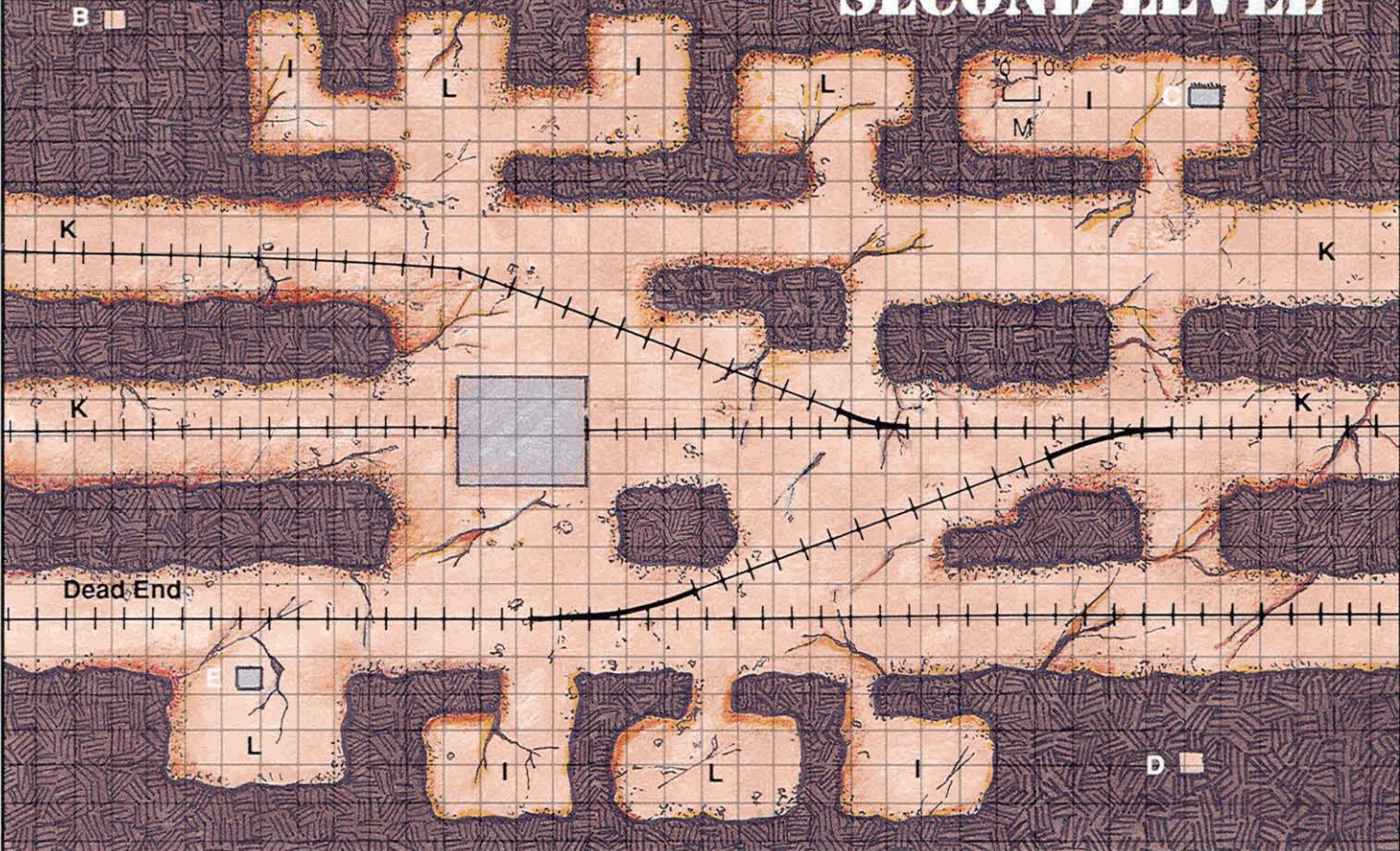
The mine contains 72 church members and a dozen children under 12. In addition to the machineguns at the entries, the armory contains enough weaponry to give each adult an assault rifle, pistol, or shotgun. The community has less than 50 rounds per weapon (except for the machineguns, with 1000 rounds each). Slave guards normally carry weapons. Otherwise, weapons are issued only in times of dire emergency (such as an invasion of the mine). In any case, weapons are usually issued with only the ammunition their magazines contain, except for double-barrelled shotguns, which get an additional four rounds.

SURFACE



FIRST LEVEL

SECOND LEVEL



THIRD LEVEL

NUCLEAR POWER STATION

Abandoned nuclear power stations provide one of the more interesting sites for *Twilight: 2000* adventures. This adventure deals with one such station, occupied by hostile forces, which the player characters must penetrate and secure. The layout does not represent any real power plant, and has been idealized and simplified for the purposes of this adventure.

BACKGROUND

A couple of alternative backgrounds are presented here, and referees should use these as a starting point to work the encounter into their campaigns. With slight alterations, the nuclear power station can be used almost anywhere in Europe or the United States and in many places throughout the rest of the world. Simply change the names of the groups, characters, and places involved to reflect the changed geography (such as by substituting marauders for the Spetsnaz).

Doctor, Doctor: The characters learn from local villagers that a Spetsnaz unit has kidnapped their doctor. A few daring local hunters

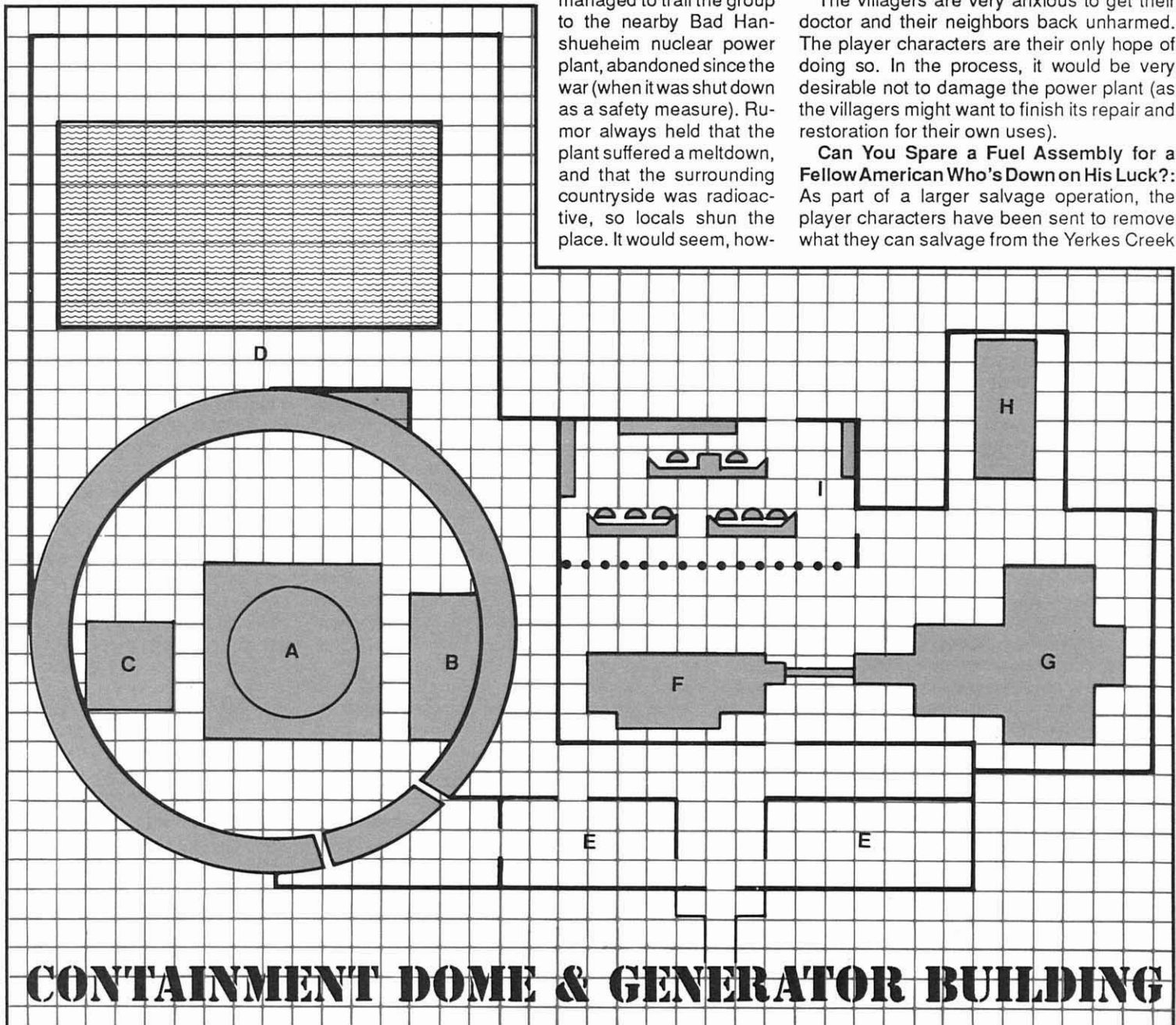
managed to trail the group to the nearby Bad Henschueheim nuclear power plant, abandoned since the war (when it was shut down as a safety measure). Rumor always held that the plant suffered a meltdown, and that the surrounding countryside was radioactive, so locals shun the place. It would seem, how-

ever, that the rumors were wrong, for the Spetsnaz team has settled in and has begun kidnapping villagers from miles around, undoubtedly for some nefarious purpose.

Suspicious were confirmed a couple of days ago, when a local abductee managed to escape with the tale of what's happening at the plant. The Soviets are forcing the doctor (who used to be a nuclear physicist) to restore the station to operating condition, using the villagers as slave labor. Since protective suits are in scarce supply, some of the captives are being exposed to lethal doses of radiation as part of the project (working with the fuel assemblies, etc.).

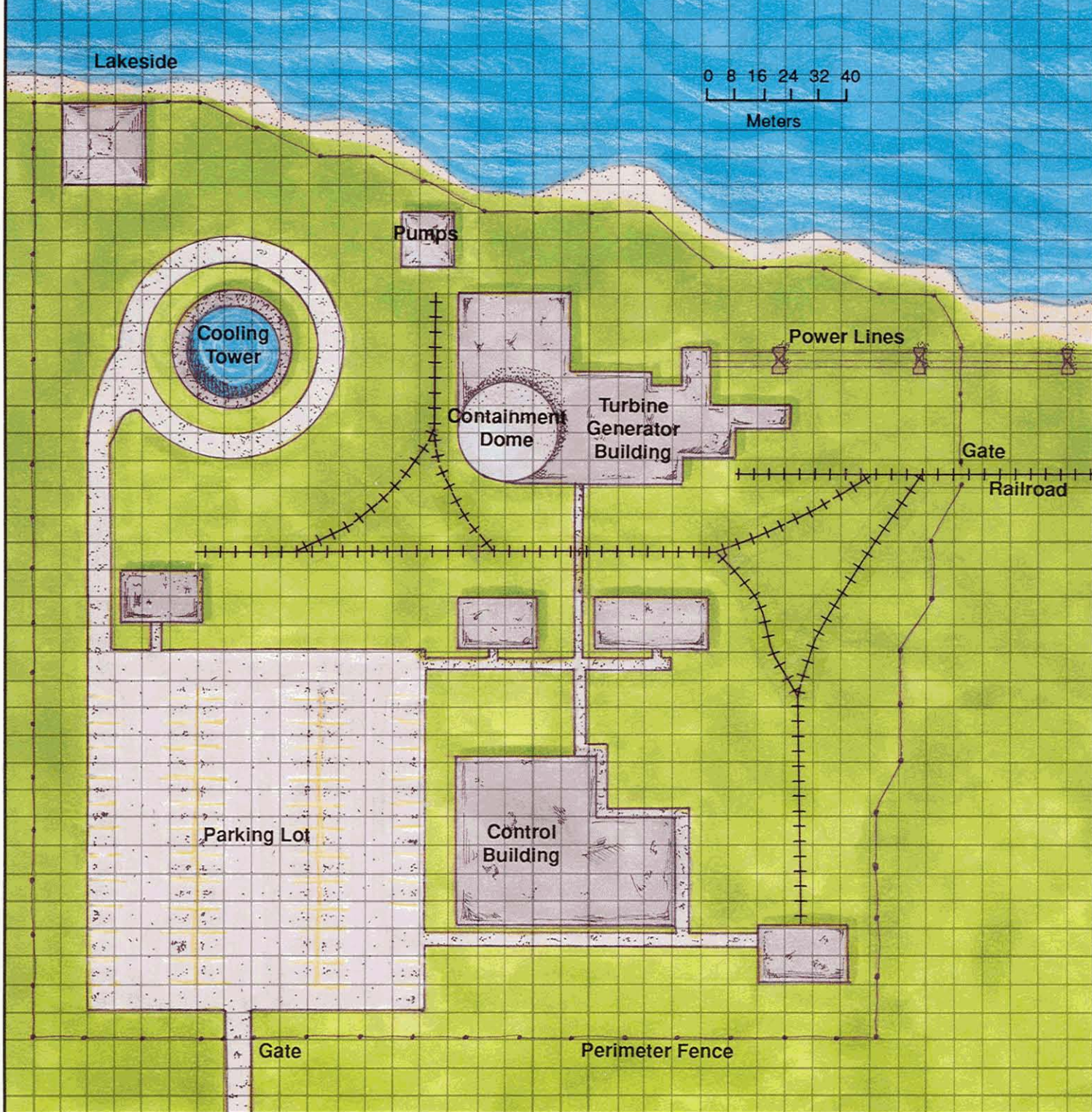
The villagers are very anxious to get their doctor and their neighbors back unharmed. The player characters are their only hope of doing so. In the process, it would be very desirable not to damage the power plant (as the villagers might want to finish its repair and restoration for their own uses).

Can You Spare a Fuel Assembly for a Fellow American Who's Down on His Luck?: As part of a larger salvage operation, the player characters have been sent to remove what they can salvage from the Yerkes Creek



CONTAINMENT DOME & GENERATOR BUILDING

PLANT OVERVIEW



Nuclear Power Plant (YCNPP). Yerkes Creek is not under anyone's control at this time, and a campaign to secure the surrounding territory is beyond the resources of the characters' sponsors. Ascouting and recon party checked out Yerkes Creek last month, and determined that the plant contains many usable and almost irreplaceable electronic parts, as well as a number of other valuable items—among them a 12-ton diesel engine and generator in nearly perfect condition.

The player characters have been sent to se-

cure the station, and begin dismantling and packing up salvageable equipment. A slower-moving transport column has also been dispatched and will arrive in a few days. To help them in determining what is important and what is junk, the PCs have been assigned a technical advisor, a former nuclear power plant worker (who is almost as valuable as the parts they have been sent to salvage). Upon their arrival in the vicinity of the station, however, the group discovers that the place has been taken over by a band of marauders, which ev-

idently intends to carry off anything that isn't nailed down for sale to a nearby warlord.

The PCs must assault the power plant and kill or capture its garrison without damaging its vital machinery in the process. They must also bring the technician back unharmed.

APPROACH

The player characters' group is presumed to be able to approach within sight of the plant without detection by those inside.

Recon: Upon their arrival in the vicinity of



CONTROL BUILDING

the plant, the characters will presumably conduct a short reconnaissance of the area (this is a task, ESY: RCN). Catastrophic failure means the recon scout does not notice the booby traps around the perimeter of the plant, which means the characters may blunder into them. A normal success means the character spots the booby traps and all but one sentry position. Conspicuous success means the character spots all sentries and the booby traps along the perimeter fence.

The plant consists of the cooling tower, the containment dome/turbine building, and the control building. The plant also contains several storage buildings of various sizes. The power plant is surrounded by a perimeter fence, described later on.

Any character will be able to determine where the kidnapped villagers are being held. They are housed in hastily erected metal sheds in an improvised holding area next to the con-

tainment dome/generator building. This holding area is surrounded by a fence constructed of materials salvaged from the perimeter and augmented by a few coils of concertina wire.

Doctor: If the PCs have thought to bring along the recent escapee, they will know the general layout of the camp without having to perform a recon mission and will know the building in which the doctor is being held (otherwise they will have to gain this information by talking to one of the villagers—captured Spetsnaz soldiers cannot be made to reveal secrets in less than several days).

As a result of the recon (or the escapee), the PCs can be allowed to see the general station map (the referee may photocopy the map and cut away the surrounding text, or cover the text in some fashion to keep the PCs from accidentally reading it). In addition, the referee should give the PCs an idea of the number and type of troops they are facing (see below).

Spare: The shanty buildings shown on the map (used as captive labor quarters) shelter the camp followers of the marauder band.

Assault: After they see the map, the characters will need to formulate a plan of attack. Allow the group to discuss the question, but if the debate seems prolonged, spur the action on by some means (have a sentry discover the group, etc.).

MAP DESCRIPTION

Nuclear power installations typically have three main features: the cooling tower, the reactor containment dome, and the control center. Of these three, the cooling towers have little to interest PCs (although they must be intact for the plant to operate), and the containment dome (which houses the actual reactor) is a dangerous place to have a firefight (rather like juggling torches while floating on a plank inside a gasoline storage tank). The other

main terrain features are the turbine/generator building, the perimeter fence, the railroad siding (now unused), and the lake (from which the station used to get its cooling water).

Containment Dome: This building is a thick concrete structure designed to contain any leakage during an accident and thus prevent contamination of the outside environment.

A. Reactor Core: This is the center of the reactor and is where fission takes place. It is too radioactive to enter, even when shut down.

B. Primary Heat Exchanger: This device transfers heat energy from the core to the steam lines.

C. Secondary Heat Exchanger: This device transfers excess heat from the core to the cooling tower.

D. Fuel Rod Storage Room: This room contains a pool of water in which spare fuel rods for the reactor are stored. No rods are presently stored here.

E. Changing Rooms: These rooms contain lockers and racks of radiation suits. This is where workers who must enter the containment dome change into their protective suits. The suits originally stored here have been commandeered by the occupants of the plant.

Turbine/Generator Building: This building is near the containment dome (in some plants, it is in the same building) since steam lines must run from the main heat exchanger to the turbine. When the plant is operating, steam passes through the turbine, and the turbine turns the generator, producing electricity. In most plants, more than one turbine and generator combination are present, but this is a small facility.

F. Turbine: This machine converts high-pressure steam into rotary motion. It has been shut down, drained, and sealed.

G. Generator: This device converts rotary motion from the turbine into electricity. It has been shut down.

H. Condenser: Exhaust steam from the turbine is converted back into water and fed back into the primary heat exchanger for another trip through the system. It has been shut down, drained, and sealed.

I. Control Room: This is a secondary control room, where the generator and turbine are monitored. It is faced with glass and looks out over the rest of the building.

Control Building: This building houses the nerve center of the power plant.

J. Main Control Room: This room is where all functions of the reactor, turbine, and generator are monitored and controlled. It is a huge room filled with thousands of dials, gauges and computers, and tons of electric and electronic equipment.

K. Offices: The officials of the power company, the engineers who ran the power plant, and the various inspectors from the government regulatory agencies all have offices in the control building. These offices were abandoned when the plant was closed, but they are now used as quarters by the plant's occupants.

L. Lounge: Formerly the plant's employee break room, this room is now unused by the

marauders or is used as a cell to house the doctor by the Spetsnaz soldiers (depending on which adventure is being used).

M. Cafeteria: All food was removed long ago, and the room is abandoned.

N. Meeting Rooms: These rooms, like the offices, are now used as quarters.

Perimeter Fence: This is a four meter cyclone fence topped with a single strand of barbed wire. This fence is poorly maintained, except as noted below, and contains several holes large enough for a single person to crawl through or weak spots that could easily be broken through. The holes are booby trapped, but some of the weak spots remain undiscovered by the occupants of the plant.

Railroad Siding: The construction of the power plant required that a railroad siding be laid, and the rail line was retained for moving materials in and out of the plant. A large gate closes off the point where the rails enter the perimeter fence.

Lakeside: The lake is a feature of practically every nuclear power plant since it is a convenient way to provide the large quantities of cooling water needed to operate the plant. The lakeside is usually the site of some sort of pumping machinery building, but these large sheds containing huge water pumps are of little interest to the PCs in the present situation. The pipes are undoubtedly blocked and are not useful as an entryway into the plant anyway—they lead to the reactor building heat exchange unit.

The perimeter fence runs along the lakeshore a few meters in from the high water mark. This prevented unauthorized individual from gaining access to the plant grounds from the water (before the war, nuclear power plant cooling ponds were often used for recreational purposes also).

Secondary Buildings: Since these buildings are not the site of the main action, they are not described in detail. Every nuclear facility has many smaller buildings, ranging from storage sheds to office complexes. Diagrams of these buildings are not given because they aren't relevant to the adventure. In the event that a referee chooses to set a campaign or several adventures in and around a nuclear power station, the characters may require more detailed information. Storage sheds are easy to diagram—the referee simply draws a rectangle of suitable dimensions with a large cargo door at one end. The office complexes are too complex to be easily summarized. Any suitable floor plan containing a number of office suites can be adapted for use (this kind of building looks the same regardless of whether it is connected with a nuclear power plant or a construction firm).

NPCS

European and American names have been given for each character described below. The referee is free to substitute other names as desired. The escaped villager can be any Novice NPC of the referee's creation—his other characteristics are unimportant to the adventure.

Gustav/James Petronski

Dr. Petronski is not a medical doctor. His degree is in nuclear engineering, and his specialization was in theoretical design of nuclear reactors for the military (under a government contract with his firm). With the coming of the war, the design project shut down, and Dr. Petronski moved with his wife and family to a secluded community near the power plant. Dr. Petronski was a medical orderly during his military service, and when the postwar chaos erupted, the locals turned increasingly to his medical expertise. He became the village healer and acquired considerable skill at it.

He oversaw the general sanitation of the village, forced the villagers to rebuild their sewer system and water supply to suit their new environment, and managed to save many lives by squelching an outbreak of cholera before it got out of control. Through his hobby (botany) he was able to make optimum use of the medicinal plants in the area and amassed a pretty fair working knowledge of the local floral pharmacopeia. He is irreplaceable to the villagers, and his kidnapping will mean the loss of many innocent lives.

NPC Motivations: *Heart Jack:* Wisdom. The doctor is a very intelligent man. *Heart 10:* Loyalty. He is extremely loyal to his adopted village and wants only to help its inhabitants. He is a Novice NPC with MED 60.

The Enemy

Depending upon which adventure scenario the referee chooses, the plant will be occupied by a group of marauders or Spetsnaz soldiers. These are as follows:

Spetsnaz: Soviet Spetsnaz units, by 2000, have taken considerable casualties, and contain only a few Elite NPCs. The rest of the unit is usually filled out by regular Soviet soldiers collected from various sources, and of varying quality. The group consists of four Elite NPCs (the original Spetsnaz soldiers, who now act as officers) and 36 other soldiers (12 Veteran, 16 Experienced, and eight Novice NPCs). The group is armed with four Skorpion machine pistols, four Dragunov sniper rifles, eight pistols (assorted types), four automatic rifles (assorted types), and 28 AK-74 assault rifles. As a means of balancing play, the referee should adjust these numbers upward or downward, depending on the skill and makeup of the characters' group.

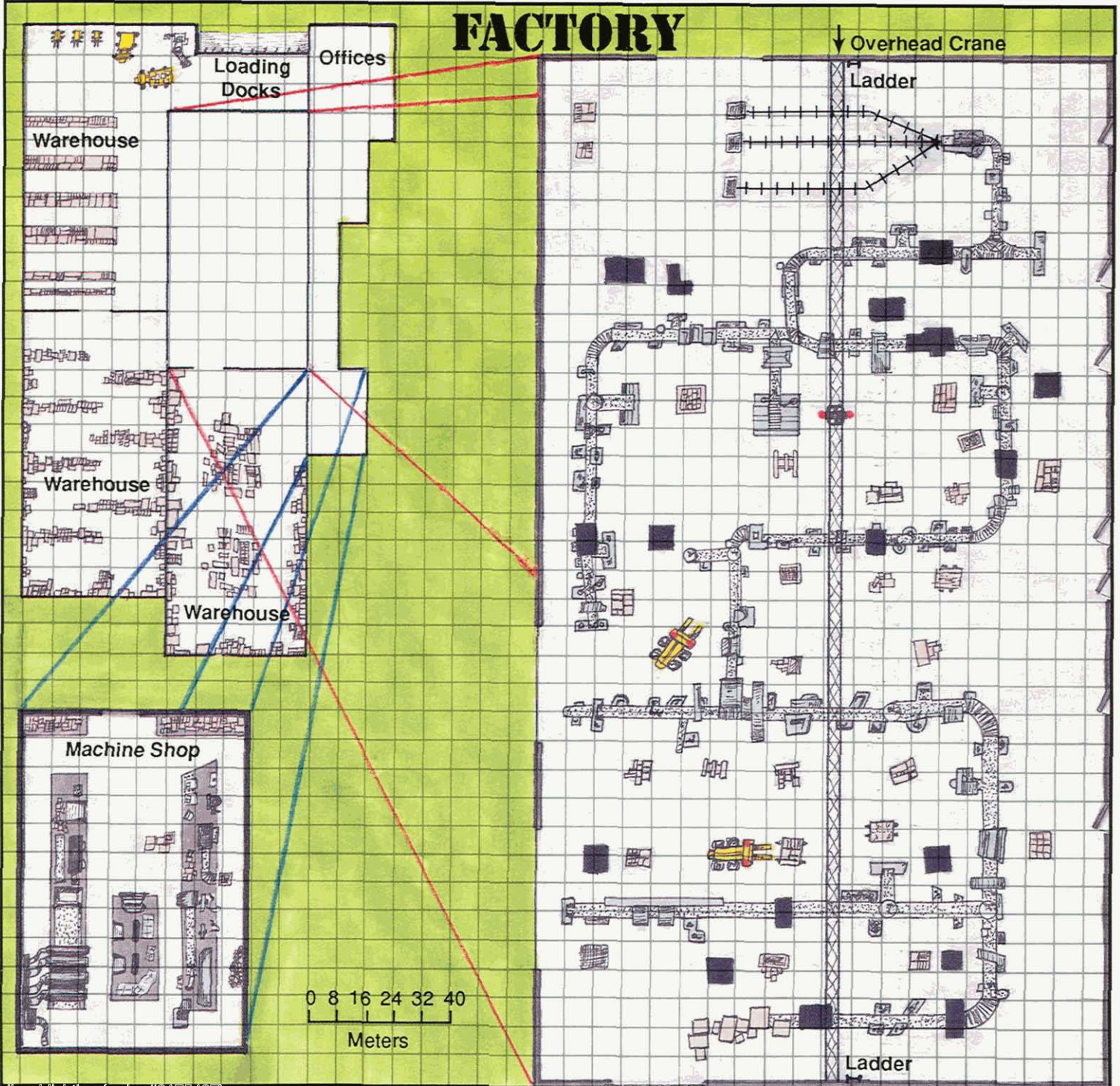
The Soviets hold captive about a dozen kidnapped villagers and the doctor. (Exactly where the doctor is when the PCs attack is up to the referee: He will be in the control building main control room during the day.)

Marauders: This group consists of four Elite (the leaders), eight Veteran, and eight Experienced NPCs. They are armed with four sub-machineguns, 12 assault rifles, and four automatic rifles (assorted types).

They are accompanied by a small number of hangers-on (camp followers, etc.). As a means of balancing play, the referee should adjust these numbers upward or downward, depending on the skill and makeup of the characters' group.

URBAN RENEWAL

This adventure takes place in an abandoned factory, but the setting could as easily be a revitalized factory after hours or even when a "normal" work shift is going on (normal for postwar industrial facilities can mean three or four workers in a plant that previously took hundreds). Due to the amount of interest people have in rebuilding industrial capacity, reasonably intact industrial facilities like this are liable to be prizes actively fought over. This adventure can easily be set in any industrialized area in either Europe or America: Possibilities include Nowy Huta near Krakow, the Gliwice/Chorzow/Katowice complex in eastern Silesia, Pittsburgh, Detroit, Chicago, and Seattle.



BACKGROUND

Sooner or later, the PCs will feel the need for something rare or difficult to obtain. It may be forged papers, a rare part to rebuild a rangefinder, or ammunition for that G11 they've been hauling around for months. When the time comes, they will have to go to the Boss.

The Boss is the fellow who runs the local rackets and black market, who has what they want if they're willing to pay the price. After a short period of spirited negotiations, a price is agreed upon and a meeting arranged.

The exchange (what the PCs want to trade for what the Boss wants to receive) will take place in an abandoned factory in a deserted part of town (alternatively, the factory can be partially restored and functioning at a low level—in which case the meeting will be scheduled for after working hours).

APPROACH

PCs can scout the approaches to the factory if they wish but will probably not find anything amiss.

The factory building is located on the edge of town, and is served (or was served) by several roads and a small trunk railroad line. The factory complex is surrounded by a three-meter chain-link fence (in good condition if the factory is revitalized, but with several large holes in it otherwise).

The appearance of the building will also depend on its current status. If it is revitalized, it will be in fairly good shape. Parts of it may have been cannibalized to repair other sections, replacement windows and doors improvised out of plywood, etc.

Actually, this situation is a double cross, and the Boss intends to kill them or take them prisoner (to turn over to whoever will pay the most—probably lots of people by now would like to get their hands on the player characters), and keep whatever the characters were going to use as payment.

The characters may smell the ambush. For whatever reason, it doesn't work as planned and comes down to a firefight in the factory—the PCs versus the Boss' henchmen.

MAP DESCRIPTION

The factory, if it is working at all, is operating at a reduced level from its former capacity.

For this reason, large areas of the building will be deserted or filled with miscellaneous junk of no particular utility. In some areas, this assorted material will provide cover and/or concealment for both the

characters and the Boss' henchmen during the firefight.

The factory building is a sprawling complex with several different areas under one roof and a few smaller outbuildings. Most of these are built of reinforced concrete with heavy-duty windows, tin or asphalt roofs, and concrete floors.

Machine Shop: This is a small area containing the tools and die-making equipment for the factory (assuming it is operational; otherwise this building is deserted). This area is most important, and the lathes, grinders, milling machines, and other equipment are vital to the continued operation of the factory. For this reason, armed guards are permanently stationed here in addition to the craftsmen and machinists.

Offices: These are the administrative offices for the factory management, shift supervisors, etc. Some of the offices open out onto the assembly line area. The rooms currently serve as quarters for the workers at the factory (assuming it is functional—otherwise they are deserted).

Main Work Area: This is the huge room containing the main assembly area. If the factory is in use, it will be underutilized since the plant is operating considerably below its prewar capacity. This is the largest single room in the factory building and will be filled with machinery, benches, storage bins and racks containing components and subassemblies for whatever is being manufactured here. All this will be distributed along an assembly line conveyor belt, with several small conveyors feeding into it from the sides.

The whole arrangement is about waist high and provides excellent cover (and some concealment) to all characters adjacent to it.

If the meeting is taking place at night and the lighting is poor, screened items block line of sight. All items provide cover equivalent to an armor factor of 2 up to one meter high for black items, 1.6 meters high for all other items. Characters may kneel and fire from behind all screened items, and may stand and fire from behind all black items (exposing head and chest to return fire).

Items indicated with a screen are considered to provide cover but do not block line of sight, meaning that people can see over them. Items noted in black block line of sight for all characters on the ground.

Overhead Crane: This device is a huge crane in the rafters of the main work area of the factory, used to install, reposition, and remove extremely heavy machinery. It has a small catwalk running the length of the building, and several of the Boss'

henchmen will take up ambush positions here (the exact number is up to the referee). Characters on the catwalk can see everyone on the assembly area floor and can fire on (and be fired on by) any character anywhere on the floor. The catwalk is accessible from ladders at either end of the main work area.

Warehouses: These hold the component parts needed for assembly operations and the final product prior to shipping. They are presently underutilized. Nevertheless, there still be many crates, boxes, and so on behind which the characters and their adversaries will be able to find cover during the fight.

Loading Docks: These are large bays enabling trucks to load/unload directly onto the factory floor using forklifts, etc. These are usually divided into incoming docks to receive component parts or subassemblies, and outgoing docks to ship the finished product.

NPCS

The referee should develop a name and background for the Boss, suited to the country where the adventure is taking place. Despite the pronouns used below, no reason exists why the Boss could not be a woman. This would be an excellent ploy on the part of the referee to divert suspicion if the characters have dealt with other bosses before. (The nickname "Dragon Lady" should be avoided as trite, however.)

The Boss

The Boss is typical of a type that exists in every country in 2000: the ultimate extension of entrepreneurial spirit combined with an almost total lack of respect for morality and massive greed. The Boss is totally ruthless in pursuit of his goals, which are to make himself as comfortable as possible during the present crisis.

NPC Motivation Results: *Spade King:* Deceitful. *Diamond King:* Selfish.

Henchmen

The Boss maintains a collection of thugs, knee-busters and sundry unsavory ne'er-do-wells to enforce his wishes and assist him in carrying out his nefarious schemes. These consist of three Veteran and 15 Novice NPCs armed with pistols and SMGs of the referee's choice. Ammunition is a little short, so the henchmen will have only two or three full magazines per weapon.

The Veteran NPCs will be deployed with the Boss; the remainder of the henchmen will be distributed in ambush positions throughout the factory.

CASTLE KEEP

Castles are, unfortunately, not very common to North America, but they can be found in many other parts of the world. It is a very barren role-playing campaign that does not sooner or later incorporate these symbols of romance and adventure.

BACKGROUND

This adventure can best be started when you roll up a wild dog encounter. Resolve the encounter normally, except that the dogs will continue to attack until all are killed. This unusual behavior will probably prompt the PCs to examine the dogs' bodies afterward, and most of them will have considerable amounts of frothy saliva around their mouths. The dogs were rabid.

It is possible that none of the player characters were bitten, and if that is the case, there is no real need to force the issue. The rabid dog attack can serve to set the backdrop for the

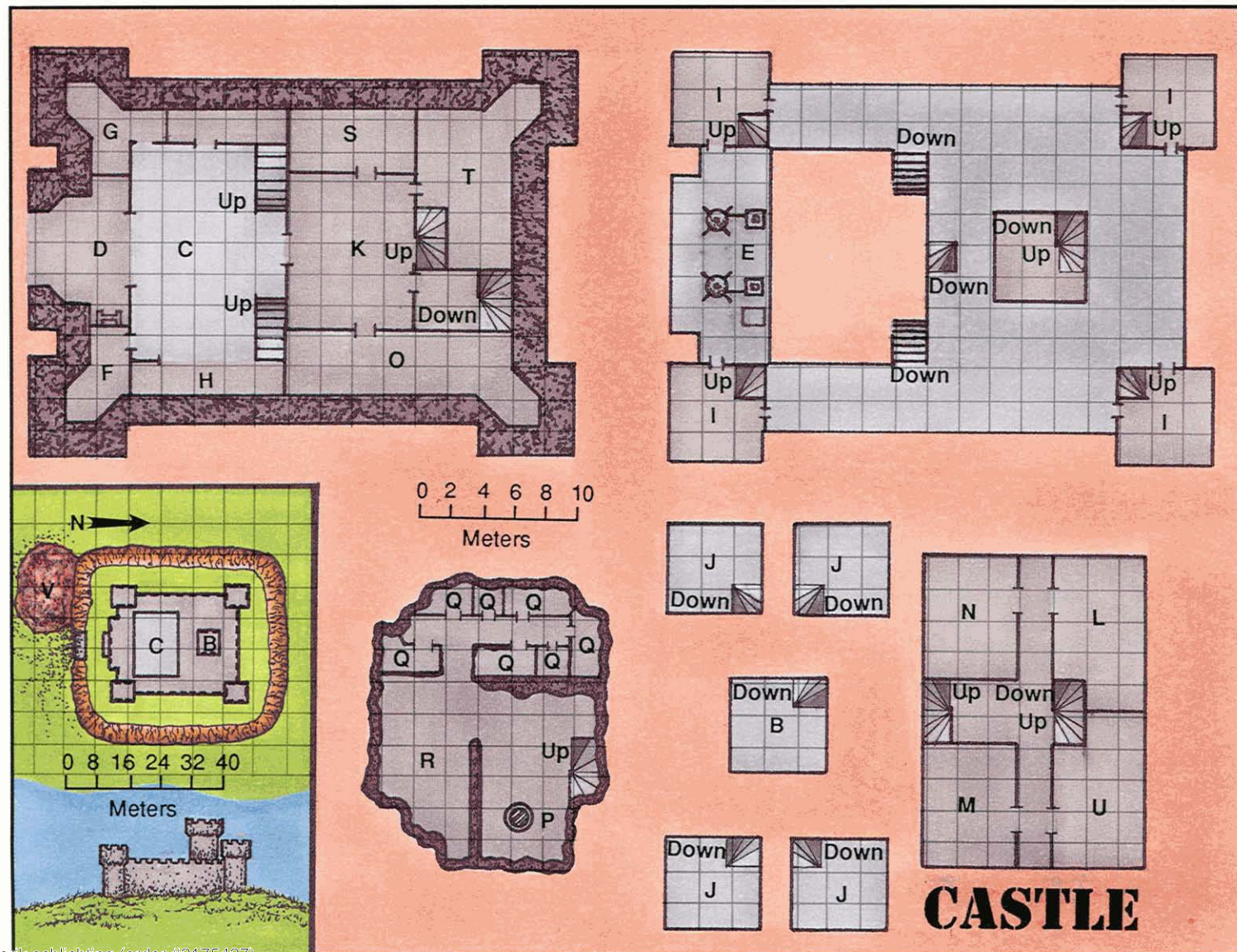
next encounter. This is a standard hunter encounter from the Group Encounter Table in the basic game.

The hunters whom the PCs meet are friendly. They are willing to trade information and maybe some fresh game for MREs. The village the hunters come from has been terrorized by wild, rabid dogs recently, and several people have been bitten, including their mayor, several hunters, and two children. As the villagers have no rabies antitoxin, they are very concerned for the victims.

If the PCs tell the villagers about killing the wild dogs, the villagers will be both impressed

and grateful that at least no one else will be victimized by them. If any of the PCs were bitten, the villagers will suggest that the villagers and PCs combine their efforts to help the victims. If none of the PCs were bitten, the villagers will appeal to this group of obviously capable men to help them out.

A local warlord has set himself up in an old castle in the vicinity. Several villages pay him tribute, but the village these hunters are from has steadfastly refused to pay. Their defenses are fairly strong, and, while the warlord might be able to overcome them, he has been unwilling to expend the men and ammunition needed to do so. When he heard that rabid dogs had attacked the village, however, he sent word that he had a supply of rabies antitoxin but that he would make it available only if the village surrendered half its arms and ammunition, and agreed to pay tribute. The may-



or has refused to agree, even though he is one of the victims and is facing a potentially horrible death.

The only way to get the needed medicine is to take it. Unfortunately, while the villagers are brave, none of them are trained soldiers, and they have no idea how to storm a castle. The PCs, however....

APPROACH

The villagers have 10 men with sufficient experience in woodcraft and combat not to be a liability in such an attack. They will take the village's best small arms and help the PCs storm the castle. They have never been inside, but the warlord is known to have a force of over 20 men defending his stronghold. The castle itself is only one day's march from the village.

The castle is on a low, grassy hill surrounded by a now-dry moat. The slopes of the hill are gentle but broken by occasional low rock outcroppings. The brush has grown fairly thick on it during the last year or so and is about two feet high. Although it does not provide very good concealment for a daylight attack, at dusk it will cast very broken shadows, and at night it will make PCs approaching it virtually invisible.

The castle has walls which are about six or eight meters high (20 to 25 feet), and the tops have crenelated battlements. Towers at the corners stand about three meters taller than the walls, and the rear of the castle has an enclosed keep with a somewhat taller tower.

A drawbridge and portcullis protect the gate at the front of the castle, and no other means of entry is obvious (aside from scaling the walls). During the day, a visible guard stands watch in the main tower, along with one on the east, west, and south (gate) walls.

Approaching undetected through the brush and/or climbing a wall undetected will be impossible during full daylight, DIF: RCN during dusk, and AVG: RCN at night.

MAP DESCRIPTION

This is a fairly early castle, as can be seen by the square rather than round towers. Despite that, it's in remarkably good shape, virtually mint condition.

A. Wall Guards: These are the positions occupied by the wall guards when the PCs attack. The walls themselves are AV 20.

B. Tower Machinegun Nest: The fourth visible guard is in the main tower and mans a PK machinegun. He watches to the north, but the gun can be repositioned to face any direction and sweep the courtyard below. Because of the difficulty of firing up, the machinegunner is considered obscured. He is completely covered by AV 20 stone walls except for his head.

Characters in the tower machinegun position may not fire down at targets in the grid square adjacent to the base of their tower unless they lean out through a battlement opening. If they do so, they are no longer obscured and have only their legs and abdomen covered.

C. Courtyard: This is an open cobblestone

courtyard which is connected to the gatehouse to the south, the keep to the north, and several small rooms to the east and west. The portcullis is made of heavy wood beams bolted together in an open framework, the joints reinforced with iron plates and rivets, and the points on the bottom capped with iron points. It has an AV of 5. The thick drawbridge is made of oak timbers and has an AV of 5 as well.

D. Lower Gatehouse: This is an enclosed entryway with overhead cover. The stone framing around the gateways at either end have AV 10. A ladder leads up the east wall to the upper gatehouse.

E. Upper Gatehouse. This is the roof of the gatehouse. A trap door with a ladder leads down to the gatehouse. The simple dead bolt is routinely left unbolted. Two large windlasses have now been connected to power winches. The one on the east raises and lowers the drawbridge, while the one on the west raises and lowers the portcullis.

F. Guardhouse: This is a room off the courtyard. An alert guard is stationed here, as well as the guard commander working at a desk.

G. Servants' Quarters: Several serving and cleaning women have their quarters here and will probably be here when the attack takes place.

H. Stable: The warlord's personal horses are kept here.

I. Tower Interior: The interior rooms of the towers on the battlement level have arrow slits on their exterior walls which provide good protection and fields of fire for riflemen. Treat fire on riflemen here the same as for the tower machinegun position. Characters in the tower interior rooms may not fire down at targets in the grid square adjacent to the base of their tower.

J. Tower Roof: These open tower tops also have good protection and fields of fire. Treat them the same as targets in the machinegun tower unless fired at from the machinegun tower itself. Then treat only the individuals' legs as covered by the wall and do not treat them as obscured.

Characters in the tower roof positions may not fire down at targets in the grid square adjacent to the base of their tower unless they lean out through a battlement opening. If they do so, they are no longer obscured and have only their legs and abdomen covered.

K. Great Hall: Heavy wooden tables and benches are here, as this is where the warlord and his men take their meals. The door to the great hall is thick oak (AV 2) and has a heavy bolt to secure it. It is not normally bolted, but an armed guard stands on duty here, and six off-duty guards lounge nearby.

L. Master Bedchamber: This is the warlord's private room. It is always locked when he is not present. About \$3000 in gold is hidden in a chest under his bed. Five assorted automatic pistols are in a case on the wall. Each has a loaded clip inserted and a round in the chamber.

M. Office: The warlord will be working in an office with a clerk and an armed guard at the

time that the attack on the castle begins.

N. Study: This was a library but now has an easy chair, several boxes of magazines, a compact disc player, and several hundred CDs on the shelves, mostly German heavy metal and U.S. country and western.

O. Guards' Quarters: Ten off-duty guards are here at the time of the attack.

P. Well: This is the castle's source of fresh water. If the PCs explore its depths, they will find that 10 feet down the shaft is a wooden door which opens into a small tunnel. This tunnel merges in the woods about one-quarter of a mile away from the castle.

Q. Dungeon Cells: These old prison cells are no longer used, and the doors are almost rusted solid.

R. Torture Chamber: This is a dusty and unused collection of various torture devices right out of an old horror movie. In the room is also an alcohol-powered generator which provides the castle with power.

S. Kitchen: This is a large room with a giant fireplace over which most food is cooked. A microwave oven is also available for late-night snacks for the warlord. Four servants are working here, and the same number of off-duty guards are talking to them.

T. Storeroom: This room is full of grain, sausages, bolts of cloth, china plates, and all sorts of supplies and treasures. It is the warlord's horde, and enough food is here to feed his 30 men for at least two months. This room is locked.

U. Arsenal: The arsenal has four M-60 machineguns, two 120mm mortars, 200 rounds of HE ammunition for the mortar, several crates of grenades, several RPG-18s and Armbrusts, an AT-4 launcher and three missiles for it, about two dozen assorted civilian sporting rifles, a like amount of pistols, and thousands of rounds of small arms ammunition. This room is always locked, and an alert armed guard is on duty here.

V. Horse Herd: The main horse herd is kept in this corral outside the walls of the castle.

NPCs

The Warlord

- An Experienced NPC with a Makarov.

The Warlord's Guard Commander

- A Veteran NPC with an Uzi.

The Warlord's Alert Guards

- Seven Experienced NPCs with AKMs.
- One Experienced NPC with a PKMG.

The Warlord's Off-Duty Guards

- 10 Experienced NPCs with Mausers.
- 10 Novice NPCs with Mausers.

The Village Strike Force

- One Veteran NPC with an AKM.
- Two Experienced NPCs with Mausers.
- Two Experienced NPCs with double-barrelled shotguns.
- Two Experienced NPCs with bolt-action .22 rifles.
- Three Experienced NPCs with AKMs.

THE PASSING OF THE FLAME

Military cantonments are another increasingly common feature of the landscape. As centralized control and management of supply have broken down, military units are forced increasingly to rely on their own resources. Usually this means staking out a piece of territory and turning the men into farmers, mechanics, tailors, carpenters, and all of the other trades needed to sustain a community of several thousand souls. The Soviet Army, in many respects, had a head start on this—for years before the war units were forced to practice a limited form of self-sufficiency in certain areas. Many units, for example, grew their own vegetables, mended their own uniforms, built their own quarters, and so on. But every nation's army has been quick to learn.

BACKGROUND

A DIA agent normally working out of Lublin contacts the PCs wherever they happen to be at the moment. He tells them that he has information that a large gasoline convoy has just come into a nearby Soviet cantonment. The plan is to use the gas to make several divisions mobile for a big drive into Latvia. The U.S. forces there are in even worse shape than those in Poland, hard as that may be to believe. The PCs (the DIA agent insists) have a duty to their fellow soldiers to do what they can to keep the operation from coming off. In this particular case, doing what they can means penetrating the Soviet cantonment and blowing up the fuel trucks.

The DIA agent has been unable to convince any of the local people he works with to try anything this risky. A local partisan band, however, is willing to guide the group to the cantonment area and will stage a diversionary raid to help cover the mission.

APPROACH

The approach for this adventure will actually be divided into two phases: the operational approach and the tactical approach.

The operational approach begins when the PCs and their DIA friend link up with the partisan band. The DIA man will then leave them, and the partisans will guide them to the Soviet cantonment. The operational approach consists of three days of travel through cantonment-type territory with normally generated encounters. This in and of itself will be something of a challenge.

Once the group has reached the vicinity of the central camp, the PCs and their partisan allies must make their plans. The partisans are unwilling to make an attempted entry. They are actually rather down on the whole idea, but have agreed to go along with it because they need the continued backing of the DIA. (If it were up to them, however, they would far rather that this Soviet unit succeed in gassing up and moving out. Latvia's loss would be Poland's gain.) Nevertheless, out of loyalty to the Americans, they are willing to launch a diversionary attack. This will consist of an attack on one of the gates or guard towers, a lot of submachinegun fire and grenades, fol-

lowed by a couple of smoke grenades to add to the confusion. With a little luck they might even hurt a couple Russians. The important thing is that it will distract the Russians from whatever is going on and draw their reserves in that direction.

Whether the diversion is launched early (to cover the American's entry) or late (to cover their withdrawal) is up to the PCs. Once they break out they will probably not link up with the partisans again, as the PCs will be running at full speed themselves. The PCs should study the map and decide on their course of action.

MAP DESCRIPTION

Although a military cantonment area covers miles of outlying fields, dwellings, and guard posts, a central encampment constitutes the administrative hub of the organization. The map shows a typical central encampment with its associated civilian quarters.

A. Administration Building: This is the main headquarters building of the unit. It has a large central reception area with five or six desks for clerks and a telephone switchboard. The interior of the building is subdivided into a number of offices and conference rooms, as well as a suite of rooms dedicated to radio transmitters and receivers, decoding machines, and a radio direction finder.

B. Barracks: Each barracks is the home for 20 to 30 soldiers. Soldiers are quartered by unit, with several private rooms occupied by senior NCOs, and two or three large rooms with bunks for the privates. Officers are housed separately. Each barracks building will have 15 to 20 men asleep late at night. Seldom will more than three or four (roll 1D6) off-duty men be present at other times. Individual units are housed as follows:

- B0:** Officers' quarters.
- B1:** 1st Infantry Company.
- B2:** 2nd Infantry Company.
- B3:** 3rd Infantry Company.
- B4:** 4th (Weapons) Infantry Company.
- B5:** Vehicle crews (part).
- B6:** Artillery gunners.
- B7:** Medical personnel and remaining vehicle crews.

C. Motor Pool: All of the unit's remaining armored vehicles are parked here, with many

of the motor transports as well. Four or five vehicles will usually be in the maintenance shed undergoing repair. Ten driver/mechanics work here most of the time during the day, along with 10 civilian laborers. Two armed guards always stand at the gate, with one in the maintenance shed and one more walking the fence. The fence is two layers of chain link with barbed wire on the top. The area between the two fences is mined, with a mine density of 0.5 per grid square.

D. Grain Silo: This is a large grain silo with a corrugated metal shed attached. It is always partially full of bulk grain waiting to be ground at the flour mill. The metal shed houses a mechanical conveyor belt used to move the grain to and from trucks. Seldom is anyone working near the grain silo except when active loading is taking place.

E. Barns: The cantonment has two barns—the larger one houses about 40 horses, although many of these are usually in the connected pen. The smaller barn has 20 dairy cows. Two civilian workers are usually in each barn during the day. There is a 50-percent chance (roll 1-3 on 1D6) of an officer being in the barn caring for his own riding horse.

F. Fields: The edges of several outlying fields are visible on the map. These are usually covered with stubble in the fall and winter, and are only plowed immediately prior to planting. Standing crops cover them in the late spring, summer, and early fall. Crews usually work in the fields during the day during plowing and harvest, and teams of boys and girls are often used to weed the fields while the crops are ripening.

G. Livestock Pens: The livestock pens and their small attached shed house various numbers of sheep, pigs, and poultry. One civilian worker usually tends or works nearby each pen during the day.

H. Hospital: This is a small hospital with two wards, an operating theatre, and an attached clinic for treating the civilian personnel who live in and near the encampment. Six to eight medical personnel are usually on duty during the day and two at night.

I. Ammo Bunkers: Each of these concrete bunkers is sunk into the ground so that the roof is only one or two feet above ground level. The

earth has been excavated away from their front, and the front of each bunker has been further reinforced with sandbags. Each bunker holds a selection of small arms, small arms ammunition, mortar and artillery rounds, grenades, and bulk explosives. No one is ever on duty in the actual bunkers.

J. Mess Hall: This is a large central cafeteria with an adjoining kitchen facility, plus a separate room for the officers' mess and a small private dining room. Eight kitchen per-

sonnel are usually on duty here during the day and an armed guard at night.

K. Slaughter House: This is a large facility used to slaughter cattle and dress meat. A large cattle pen and small refrigeration plant are attached. Six civilians work here during the day, and an armed guard is present at night.

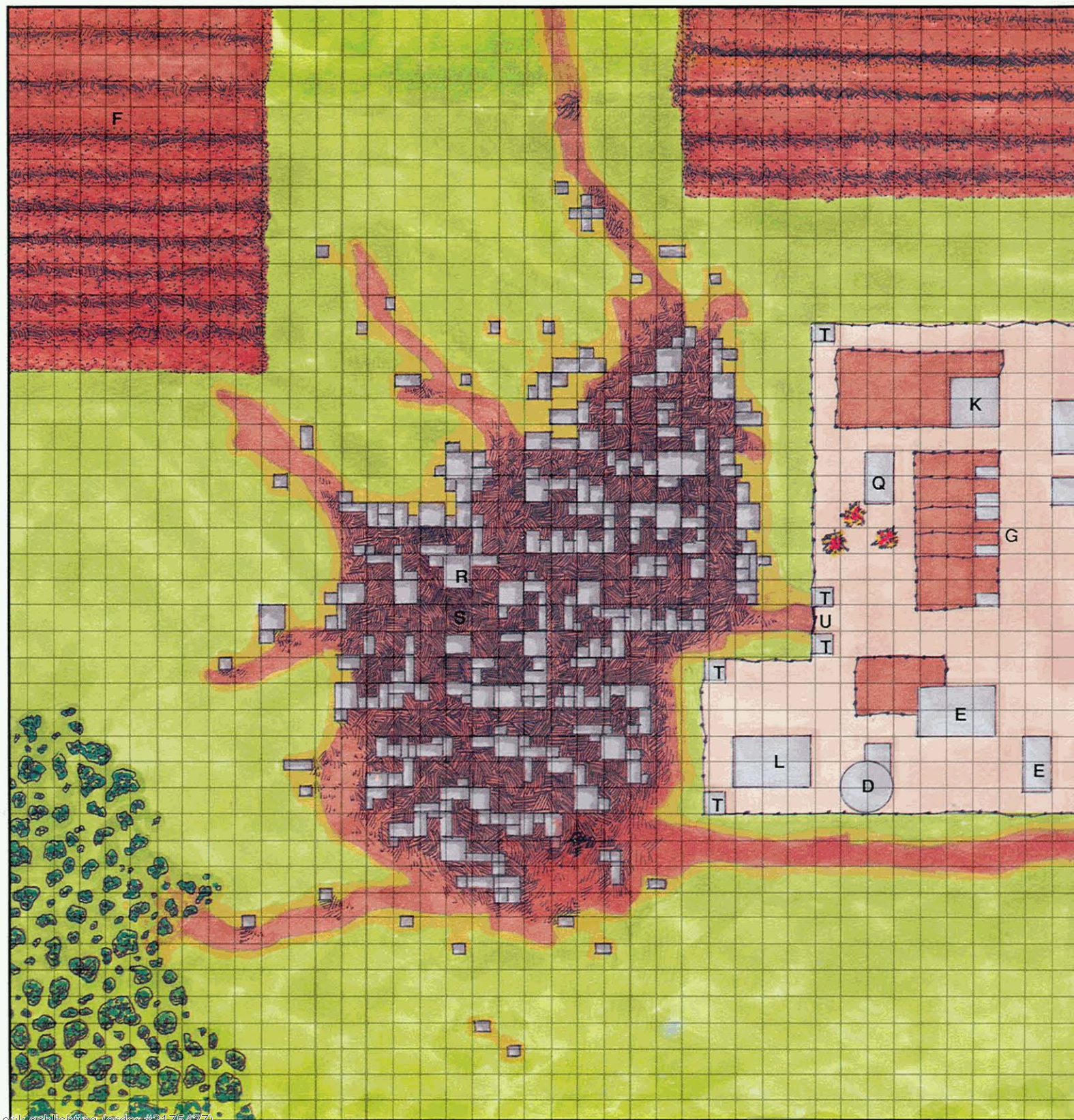
L. Flour Mill: The grain grown by the community is ground to flour here. Bagged flour is stored in an attached shed.

Six civilians work here during the day, and

an armed guard is present here at night.

M. Large Still: This is a large, fixed still (as described in the basic game) used to make fuel spirits out of cellulose waste from the flour mill and the wheat fields. The alcohol distilled here is pumped into the storage tanks at site N described below.

N. Fuel Depot: The four large raised alcohol tanks here each hold 500 gallons of alcohol. Gravity feed hoses with vise clamps are attached to the bottom of the tanks and are used



to fuel vehicles. Two civilians work here during the day.

O. Generator: The corrugated metal shed houses a large, alcohol-fueled generator that supplies the entire compound with electricity. At least one civilian worker is always on duty here maintaining the generator.

P. Fuel Truck Hardstand: This is a large, square depression, with the north side gradually sloped to form an entry/exit ramp. The floor of the depression is covered with pierced

steel plating. The 12 heavy fuel tank trucks filled with gasoline and parked here are covered with canvas tarps.

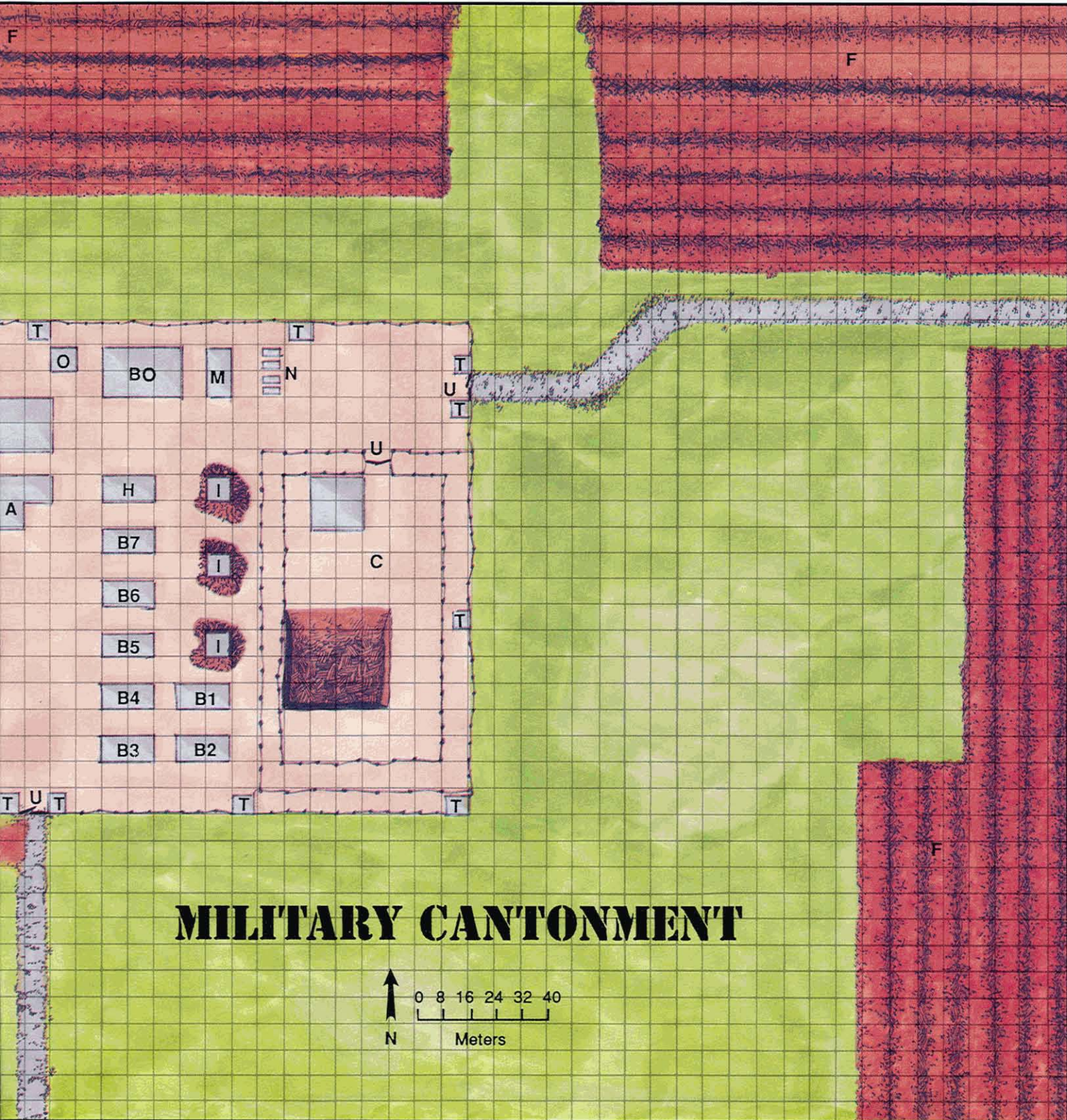
Q. Laundry: Several large, open fires are used to heat water for the laundry. The laundry proper is staffed by 12 civilian women during the day.

R. "The Kremlin": This is a two-story, irregularly shaped, leaning building of remarkable architecture and design.

It is built of corrugated metal, logs, timber,

bricks, and anything else the owners could scrounge up. It is amazing that it manages to stay standing at all. During the day it is quiet, with the owners and staff asleep upstairs. At night the bottom floor is a low-ceilinged, smoke-filled, noisy tavern that caters to the Soviet servicemen. There is some live entertainment, and the upstairs rooms are used to consummate sudden romances which develop between the patrons and staff.

S. Shantytown: This section of the canton-



ment is where the civilian workers, their families, and the various camp followers live. It is a confusing maze of cramped alleyways lined with tin and tar paper shacks. The inhabitants scratch out a living on the bare edge of survival, beset by poverty, crime, and disease.

T. Towers: Guard towers are spaced at intervals along the perimeter security fence. About half the towers have armed guards at any given time.

U. Gate: Each gate, including the one between Shantytown and the main camp, is guarded at all times by an armed soldier.

REFEREEING THE ATTACK

The first part of the attack will involve penetrating the compound. PCs may attempt to sneak up and silence a guard. They will have to crawl forward. In each grid square they enter, make a task roll (AVG: RCN) to avoid detection by a guard. Climbing a tower will require an additional roll, and rolls made in the same grid square as the guard become DIF: RCN. All rolls at night become one level easier. (DIF becomes AVG, etc.).

If a guard detects them, then he will fire a warning shot and alert the other guard posts—surprise will be lost. Otherwise he can be silenced using body combat or melee combat attacks.

Cautious movement through the compound is made at the walking movement rate. Roll AVG: RCN (ESY: RCN at night) to avoid detection if a soldier is in position to see the PCs.

Once firing breaks out, troops in the barracks will begin to appear, armed and equipped, after 1D6 full combat turns.

The troops will then begin moving in a variety of directions to secure various installations in the compound, so the referee should have random groups of 1D6 soldiers running in various directions throughout the compound area.

NPCS

Soviet Garrison: The guards on duty at any given time are provided by one company of infantry. The other troops will be training or off-duty during the day, in barracks or shantytown during the evening, and asleep in barracks after midnight.

HQ Section

- Two Veteran NPC officers with Makarovs.
- Eight Experienced NPCs with AKMs.

Vehicle Crews

- 10 Experienced NPCs with AKMs.
- 20 Experienced NPCs with Makarovs.

Vehicles include one T-90, one BMP-3, one BTR-70, one BRDM-3, 10 five-ton trucks, six three-quarter-ton trucks, and four UAZ-469s.

Artillery

Howitzer Battery

- 10 Experienced NPCs with AKMs and one D-30 howitzer.

Mortar Battery

- 10 Experienced NPCs with AKMs and one 120mm mortar.

Medical

- 10 Experienced NPCs with Makarovs.

Infantry

- 1st Company, 1st Section
Eight Veteran NPCs with AK-74s.
One Veteran NPC with an RPK-74.
One Veteran NPC with an RPG-16 and a Makarov.

Medical

- 1st Company, 2nd Section
Eight Veteran NPCs with AK-74s.
One Veteran NPC with an RPK-74.
One Veteran NPC with an RPG-16 and a Makarov.

- 2nd Company, 1st Section
Eight Veteran NPCs with AK-74s.
One Veteran NPC with an RPK-74.
One Veteran NPC with an RPG-16 and a Makarov.

- 2nd Company, 2nd Section
Eight Veteran NPCs with AK-74s.
One Veteran NPC with an RPK-74.
One Veteran NPC with an RPG-16 and a Makarov.

- 3rd Company, 1st Section
Eight Experienced NPCs with AK-74s.
One Experienced NPC with an RPK-74.
One Experienced NPC with an RPG-16 and a Makarov.

- 3rd Company, 2nd Section
Eight Experienced NPCs with AK-74s.
One Experienced NPC with an RPK-74.

- One Experienced NPC with an RPG-16 and a Makarov.

- 4th Company, 1st Section
Two Experienced NPCs with PK machine-guns.

- Three Experienced NPCs with AKMs.
- 4th Company, 2nd Section
Two Experienced NPCs with PK machine-guns.

- Three Experienced NPCs with AKMs.
- 4th Company, 3rd Section
Two Experienced NPCs with AGS-17.
Three Experienced NPCs with AKMs.
- 4th Company, 4th Section
Two Experienced NPCs with AT-4s.
Three Experienced NPCs with AKMs.

Partisan Band

- One Veteran NPC with an AKR and two frag grenades.
- 10 Experienced NPCs with AKMs, and one frag or smoke grenade each.
- 10 Novice NPCs with Mauser rifles.



WEEKEND IN THE COUNTRY

Fortified farms are a common occurrence throughout most of the world in the year 2000, so this adventure material can be used in almost any campaign you are running. Although the background section sets the scene as Poland, it could as easily be set almost anywhere. For example, in the United States an assassination might be attempted by a New America cell, or in the Persian Gulf by any of a number of factions.

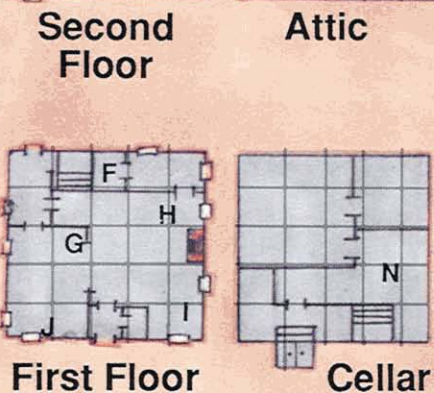
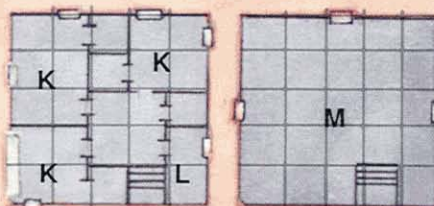
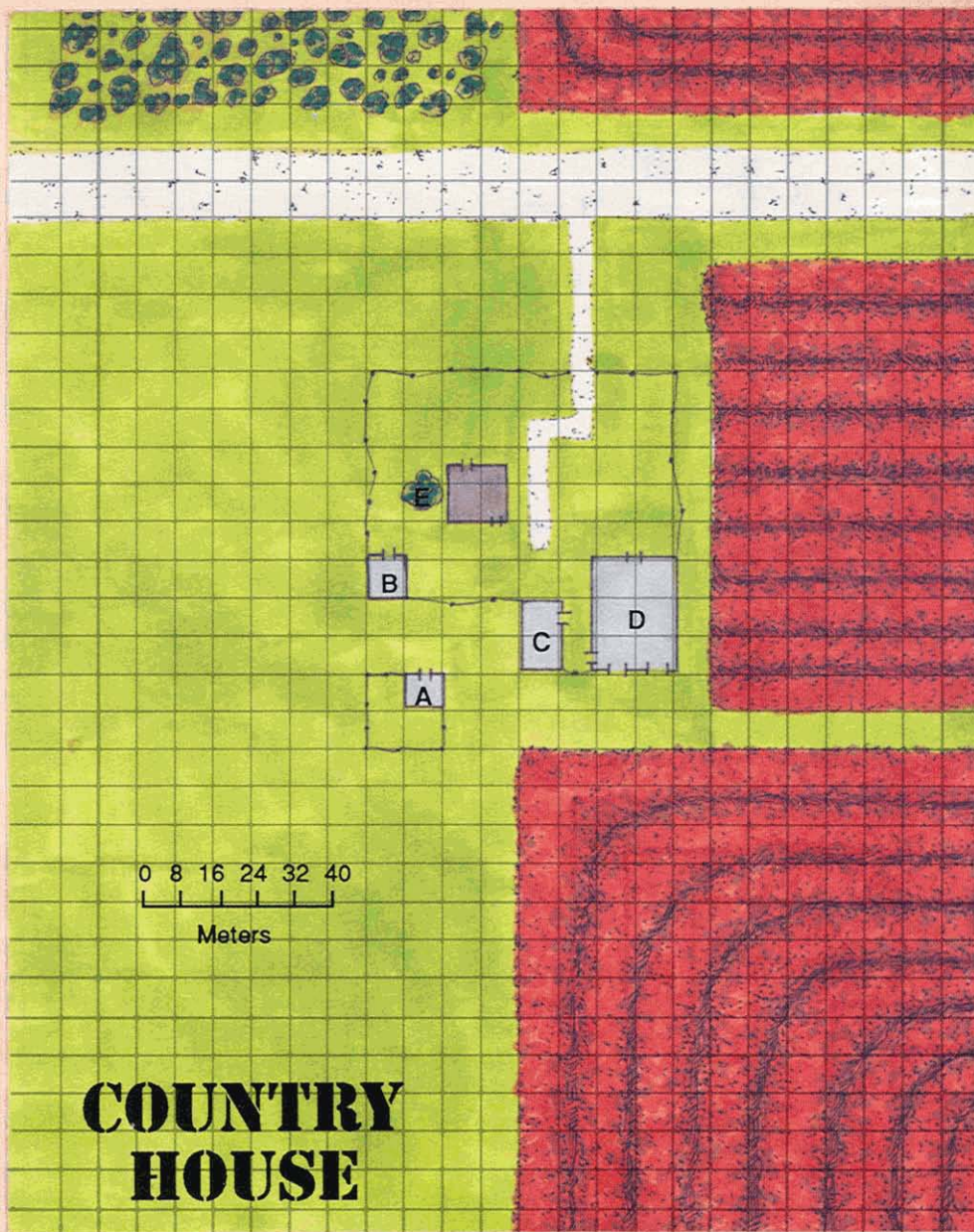
BACKGROUND

In the Free City of Krakow, Dr. Henryk Roszkowski has been an outspoken critic of the military rule of General Bohusz-Szysko since he deposed the *Dowódca* Josef Kutrzeba. Given the growing tide of populist sentiment in

the city and its environs, and Roszkowski's rising popularity as the spokesman for the movement, Bohusz-Szysko has been unwilling to take action against the doctor, especially as he has been trying to reshape his own image as a "man of the people."

Other forces at work, however, are not so reluctant to use force. Dr. Roszkowski's associates have gained information that the Greater Poland Freedom Front (GPFF) has laid plans to assassinate Roszkowski. Although Bohusz-Szysko has been warned and has taken some steps to ensure Roszkowski's safety, the Populist leaders frankly do not trust him or his security men. That is where the player characters come in.

The PCs are contacted by representatives of the Populist Movement in Krakow and are asked to guard Roszkowski through the weekend retreat, which he has arranged in the countryside outside the city. The Populists are



very certain that the GPFF will make its move then. If the GPFF's first major attempt at assassination can be beaten, then the leaders of the Populist Movement are certain they can assemble a trustworthy security force to take over the job. In the meantime, they need to have a well trained force upon whose politics they can rely. What better solution than U.S. soldiers?

APPROACH

The PCs will arrive at the farmstead several hours before the small motorcade bearing Dr. Roszkowski does. A representative of the Populist Movement will be waiting for them and will introduce them to the family who owns the farm. They are a young couple, their elderly mother, and two teenage boys. They will be leaving for the weekend, but the husband and one of the boys will return every morning to carry out necessary chores involving the livestock.

They are clearly anxious about the safety of their home and have packed away most breakable items in trucks and moved any delicate furniture into a locked room at the back of the house. (The PCs will have a key to this room.) Nevertheless, they believe in what Dr. Roszkowski is working for and are prepared to make this sacrifice for him. A supply of food is available in the kitchen, along with tin plates and cups, and stainless steel flatware. (The china and silver are both packed away in the cellar.)

The PCs will have time to inspect the farmstead (by examining the map and asking the referee questions about fields of view from different windows and so forth), and the Populist Movement representative will be relieved to see a show of professionalism.

When Roszkowski arrives, the player characters will be introduced to him. He is a small man, slender, with a cold expression and aristocratic bearing. He greets them briefly, shakes their hands, and enters the house with his aids. Soon, the entourage will leave, and the PCs will be left with Roszkowski and one male secretary.

Life On The Farm: It will become apparent very soon that Roszkowski does not like the characters very much. He is rude and supercilious to them, and will answer most of their questions, if at all, with grunts or monosyllables. He insists that the PCs prepare meals, and is fairly demanding about the level of service. If the PCs refuse to wait on him, he will have the secretary see to it and will become even less communicative. The PCs may overhear condescending conversations between the two about the cheap paintings on the walls of the home and the unimaginative, lower-class decorations, as well as demeaning comments about foreigners as well.

Very soon life will settle into a repetitive routine. Roszkowski arrived on Friday afternoon and will be returning to Krakow on Monday afternoon. The farmer plans to show up early Saturday and Sunday morning for three hours worth of chores, and the entire family will return on Monday.

Attack: The attack will be launched in the pre-dawn hours of Sunday morning. It will be carried out by the special death squad described in the NPC section below. If the PCs on guard duty are particularly vigilant (DIF: RCN) they will hear the distant sound of the approach (a slammed car door in the distance, the jingle of equipment, or perhaps a sudden noise from the sheep in the pens) which will enable them to begin waking the other characters. Otherwise, the first alert may come from gunfire from one group or the other.

The death squad will break into four groups and approach from different directions: the northern group toward the gate, the eastern group by way of the barn, the southern group by way of the animal pens and the two sheds, and the western group across the open meadow. They will attempt to remain undetected for as long as possible, and each group will refrain from firing until it is fired on or obviously detected.

Each group will continue its attack until half its men have been seriously wounded or killed.

MAP DESCRIPTION

The farm has five structures on it: the house, the barn, the machine shed, the tool shed, and the sheep outbuilding. A continuous, six-foot-tall barbed wire fence surrounds the house, linking the two sheds and the barn into a solid perimeter. The sheep outbuilding and sheep pens are outside this perimeter.

The farm has two light poles holding security lights, one by the machinery shed and one by the front gate. These provide good light for the farmyard and limited light for an additional four squares beyond it. Spotting movement in the limited light area is AVG: RCN; spotting it in the fully lit area is ES: RCN. Once the player characters are alert to the approach of the enemy, it becomes ES: Y in limited light and automatic in full light.

A. Sheep Outbuilding: This building has a door facing the house and is open to the south. Sheep feed is stored in bins inside, and about 20 sheep are in the fenced-in pen.

B. Tool Shed: This is a windowless, sturdy wooden building with one padlocked door on the north side. The PCs have the key.

C. Machine Shed: This is a corrugated metal shed with a door on the east side (facing the barn) and two boarded-over windows on the west. Inside is an alcohol-powered generator fed from an underground tank which supplies power for the security lights at night. If the death squad reaches this building, it will turn off or destroy the generator, and the security lights will go off.

D. Barn: This is a large, two-story structure, with animal stalls along the side and a hayloft on the second story. A small door is on the west side, with large double doors on both the north and south. Large windows are on the north and south sides above the doors, but the building is otherwise without windows.

E. Tree: A very large tree interferes with the visibility from several of the house's windows. From the two windows in the living room, one can see directly west, but from the southern

window, one cannot see northwest, and from the northern window, one cannot see southwest. The same is true of the west-facing window in the den and both second-floor windows. The west-facing attic window is totally blocked by the tree.

F. Entryway: Four steps lead up to the front door, as the ground floor of the house is elevated by about a meter off the ground and is set on a brick foundation. This gives good visibility from the ground level windows. The front door opens into a small entryway, and a second door leads into the living room. Both doors lock. They originally had glass in them but have since been boarded over.

G. Living Room: Windows face west and north.

H. Dining Room: Windows face east and north.

I. Kitchen: In addition to the window, note that an exterior door leads into the southern part of the enclosure. Also, a door on the southern half of the west wall leads down into the cellar.

J. Den: Windows face west and south.

K. Bedrooms: Windows face east, west and north from the three rooms.

L. Bathroom: Window faces east.

M. Attic: Windows face east, west, and north.

N. Cellar: The cellar has brick walls and dirt floors. The two entrances include the stairs to the kitchen and the storm doors leading to the south yard.

O. Storm Doors: These are double doors which open to steps leading down into the cellar.

NPCs

Dr. Henryk Roszkowski: The doctor is the spokesman for, and emerging leader of, the Populist Movement in Krakow. He supports the movement out of pragmatic concerns, not from genuine philosophical agreement. Roszkowski is an elitist. More than that, he is an arrogant snob.

Throughout the battle he will remain calm and silent, sitting in a chair in one of the upstairs bedrooms. When it is all over (assuming he has survived), he will not offer his thanks to either the PCs or the family whose home has probably been shot up.

Roszkowski is a Novice NPC for combat.

NPC Motivation Results: *Spade Jack:* Pompous. *Spade 8:* Ambitious.

Greater Poland Freedom Front (GPFF): This radical group is made up of disgruntled old-line communists unable to come to grips with the moderation of the party and right-wing nationalists intent on reasserting Poland's place as a strong, even aggressive, force in Europe. The 20-man death squad is divided into four identical teams for the assault. Each team has:

- One Veteran NPC with an SVD sniper rifle, eight magazines, and two smoke grenades.

- Two Experienced NPCs with assault rifles and six magazines.

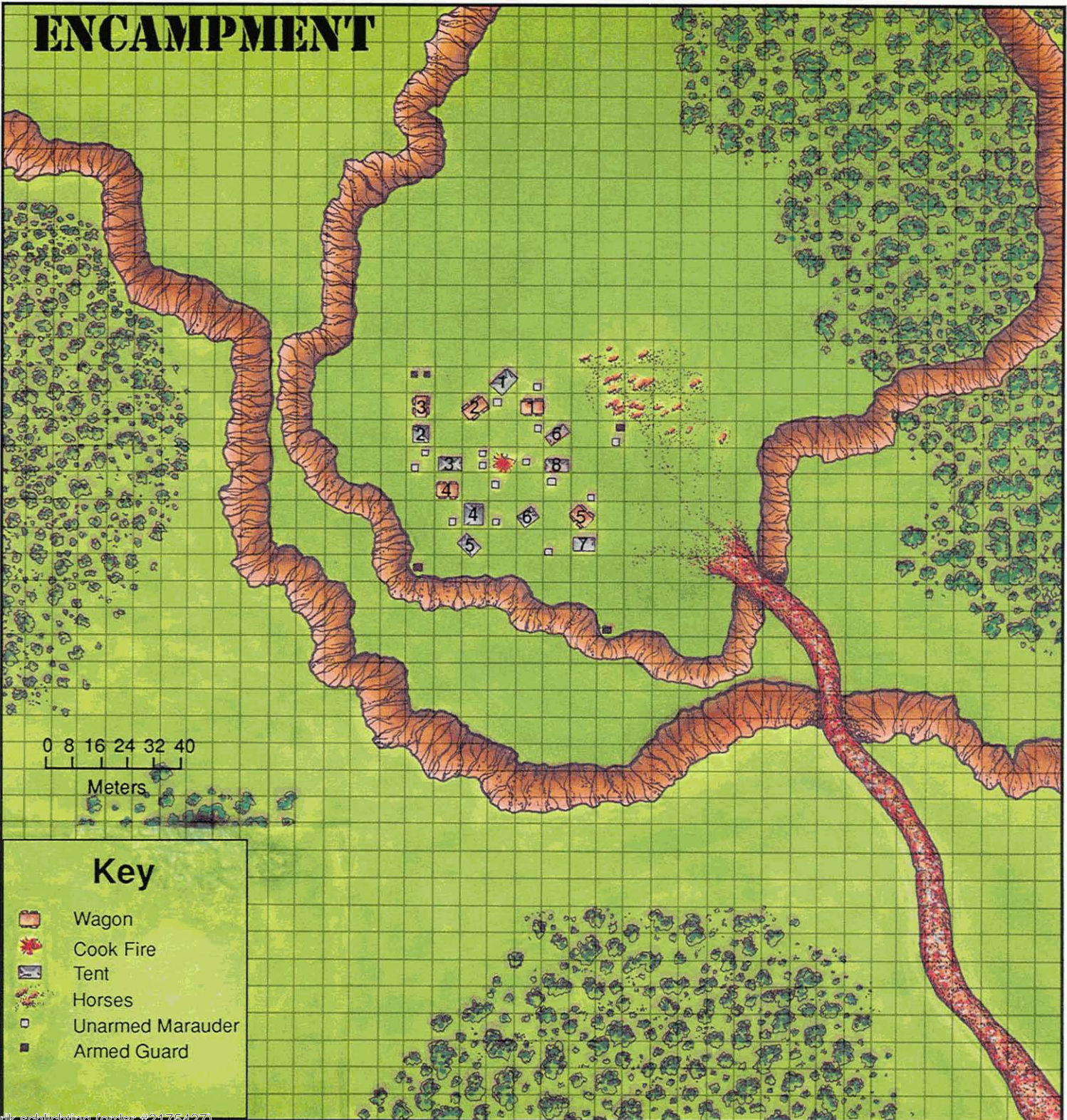
- Two Experienced NPCs with submachine-guns, six magazines, and two grenades.

SHUTTERBUG

This adventure card makes use of a marauder encampment, but it could as easily be almost any sort of temporary camp or settlement.

Likewise, the theft of an aerial surveillance camera could easily be changed to almost any other item of sensitive equipment.

ENCAMPMENT



BACKGROUND

In the course of a routine encounter, the player characters capture a GRU (Soviet military intelligence) officer who is willing to trade information in return for his freedom.

The Soviet officer tells the player characters that the new commander of the 2nd Western Front has decided the only thing that will reestablish the rapidly deteriorating morale, discipline, and cohesion of his remaining combat troops is a major victory.

To this end, he now plans to attack and take over a large military cantonment jointly manned by U.S. and British troops in eastern Germany near the Polish border.

However, the front commander knows that a U.S./British force in its own fortified area will be too difficult to assault without the benefit of some advantage or advance preparation.

To achieve that end, his chief of artillery recently sought out and made serviceable three SS-21 surface-to-surface missiles. Each of these has a range of 120 kilometers. Two have HE warheads, and the other has a chemical warhead (nerve gas).

Although they are not nuclear rockets, these missiles have extremely large warheads and are perfect for destroying the central nerve center of the cantonment, provided accurate targeting information is available.

That is where the GRU came into the picture. The GRU chief of the Western TVD still had two operational MIG-31 photo recon aircraft serviceable at Lubno. For an undisclosed price, he was willing to commit one to the mission. It successfully completed its photographic run but developed engine trouble on its return leg. The pilot ejected over the PCs' current position (roughly).

The pilot parachuted to safety but was captured by a band of marauders almost immediately. He was persuaded to explain what his mission was and, armed with his information, the marauders then found the wreckage of the aircraft.

The camera's film canister was still intact, and the marauders' next move was to contact the GRU with news of the whereabouts of the film and the price for its return. The GRU officer the characters captured made the actual contact on the ground and arranged for the exchange point.

A heavily armed GRU delegation is flying out by helicopter with the payment (in gold, ammunition, and exotic weapons), and it should arrive at its destination

at about sundown.

If the GRU obtains the film from the canister, it will have the precise targeting information necessary for 2nd West Front to make the rocket strikes on the U.S./British cantonment.

The U.S. and British forces will probably be overrun, then killed, imprisoned, or scattered. The only way to prevent this from happening is for the characters to get to the marauder camp before the GRU arrives and either steal or destroy the film canister.

APPROACH

A quick cross-country march (of about an hour's duration) will take the characters to the spot indicated by the GRU officer. Once they arrive in the vicinity of the marauder camp, they will be able to approach to within 100 meters of its outskirts under the cover of trees and brush.

They will be able to see what looks like a gypsy encampment, with parked wagons, varicolored clothing hanging to dry from laundry lines, goats and chickens wandering through the camp, a cooking fire with several chickens roasting on a spit, and several men playing eastern-sounding music on stringed instruments. And several armed men are on guard duty.

The characters must now decide quickly whether they will attack at once or attempt to maneuver for position. If the player characters send only one scout to look at the camp instead of scouting as a group, the referee should show him the map and let him study it for 30 seconds. (If he studies it longer, the guards will make one additional roll to spot him each additional 30 seconds he spends. See the section below on Refereeing the Attack.) The scout may then go back and attempt either to describe or to sketch the camp layout to the others.

MAP DESCRIPTION

A. Tents: Most of the tents are a dirty gray-brown color, although one is a dirty blue nylon tent. They are of all different shapes, and none appear to be military issue. Inside of the tents player characters will find cots, dirty clothes, and footlockers full of various personal possessions. The film canister is in a footlocker in tent A4.

B. Wagons: The wagons contain most of the marauders' food and extra ammunition. The leader of the marauder band is in wagon B1.

C. Marauder: These are the positions of the unarmed marauders when the player characters begin their attack. These ma-

raiders do not have their weapons with them, but have them either stacked against a nearby weapon or in a tent.

D. Marauder Guards: The marauders on guard duty are armed and begin the attack in the positions marked.

E. Horse Herd: The horses are grazing where shown. They are hobbled and so will not stampede, but their nervousness will warn the marauders of any approach from their direction.

REFEREEING THE ATTACK

As the characters approach the camp, the guards will have one opportunity to spot them (AVG: RCN 60). If the PCs send only one scout on ahead instead of scouting as a group, this task becomes DIF:RCN60. The guards have one chance to spot for each 30 seconds (combat turn) spent studying the encampment. The referee should emphasize to the PCs how close they are to the camp and how close the guards look. The guards will have another chance to spot the PCs as their main force moves into position (AVG: RCN 60). If the PCs attempt to approach through the horse herd, the horses will shy and give them away.

If the guards spot them, they will open fire. While the guards will not be surprised, the unarmed marauders will immediately go prone and spend all of the first turn under cover. If the PCs achieve surprise, they will have one free combat phase of fire, and then all of the marauders will go prone and spend the first turn under cover.

Whether the PCs achieve surprise or not, at the start of the second combat turn, all of the unwounded, unarmed marauders will try to move to the tents or wagons to arm themselves. Once they reach a tent or wagon, they will spend one action picking up their weapon and will then be ready to fight.

Also at the beginning of the second combat turn, the leader of the marauders will emerge from his wagon (B1) fully armed.

NPCS

Marauder Leader

- One Elite NPC with a pump shotgun.

Marauder Band

(Initially unarmed.)

- Five Experienced NPCs with AK-74s.
- Five Novice NPCs with AKMs.
- Five Novice NPCs with Uzis.

Marauder Guards

(Initially armed.)

- Five Experienced NPCs with AK-74s.

THE FLESH PEDDLERS

Ruined villages are another common feature of most landscapes in Twilight: 2000, and the villains of this particular piece may prove to be all too common as well.

perhaps scavenge for anything useful they can find left behind. Treat this situation as a regular ruined village encounter, then add the additional encounter section below.

people tied or chained together in a large shambling mob.

They are filthy; their clothes are reduced to gray rags; and they are obviously suffering from hunger, exposure, and, in many cases, beatings.

They are guarded by 10 mounted men, fairly well armed and well fed, who have several pack horses with them. This is obviously a party of slavers and their captives.

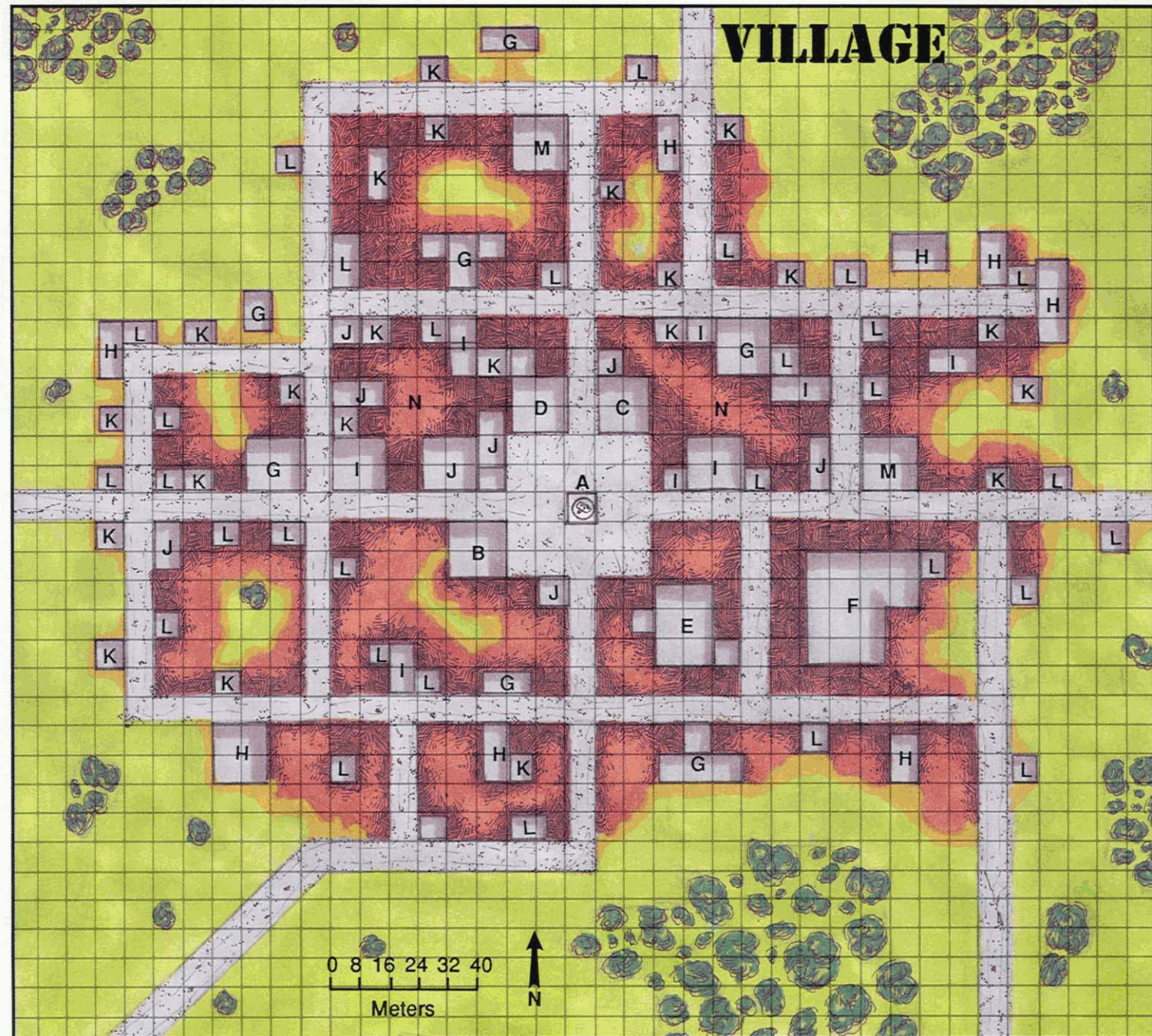
If the player characters challenge the

APPROACH

In late afternoon, no more than half an hour before sundown, another group enters the village from the opposite side. When the player characters go to look, they will see a group of perhaps 100

BACKGROUND

The characters are travelling through the countryside and come across an abandoned village lying in ruins. They decide to camp there for the night and



slavers, the slavers will warn them to mind their own business.

Those guards closest to the slaves will dismount and stand close enough that any stray rounds will hit the slaves. They will shoulder their own rifles and cover the PCs.

The PCs can choose one of four options at this point.

- They can mind their own business and leave the ruined village to the slavers and their prisoners. If so, the adventure is over, but what a heartless, spineless bunch of PCs you have!

- They can immediately open fire, despite the fact that this will mean a good many of the prisoners will be killed in the crossfire. While this isn't necessarily the clearest of thinking, at least their intentions are good. When everything is over you can lecture them about what the road to hell is paved with.

- They can back down and head back to their side of the village to think things over. If they decide to wait and see what develops, the slavers will attempt to attack them during the night and kill them or take them prisoner. This can make for an interesting fight, particularly if the player characters are on their guard and waiting for the slavers.

- They can back down and head back to their side of the village but begin sneaking back to attack the slavers as soon as night falls. This also can make for an interesting fight.

MAP DESCRIPTION

The abandoned village originally was a small rural community of 100 to 200 people but has been deserted for several months. Its streets are overgrown, and all the wood frame buildings have burned or fallen down.

Only brick and stone buildings are left, and all these are very heavily damaged. No glass remains in the windows; most roofs have fallen in or at least have large holes in them; and there are numerous signs of battle damage, particularly shell holes.

A. Town Square: This central square is covered with paving stones. In the center is a raised statue of a historical figure, unrecognizable now that the head has been knocked off.

B. City Hall: This is a large stone and mortar building, solidly built and still in passable repair. It is two stories tall, but there are several holes in the roof, and the upper floor has suffered a good deal of damage from the elements. The lower floor is much better.

C. National Bank Building: This is an

imposing, three-story, marble-fronted building. The interior is badly damaged as someone has apparently dynamited the vault and in the process brought down much of the first floor ceiling. Part of the first floor has collapsed into the basement as well, and the stairway from the first to the second floor has collapsed. If the PCs have a ladder or rope, they can climb to the second floor, and the stairway from there to the third floor is still intact. The third floor is mostly divided into offices and conference rooms.

D. Police Station: The police station is a two-story, reinforced concrete building that was apparently used as some sort of defensive position at one time. The front of the building has collapsed into the street, and the roof has fallen into the upper floor, causing about half of it to fall into the lower floor. There are several very large shell holes through the remaining walls, and much of the building is blackened by fire.

E. Church: The entire roof of the church has collapsed, although the stone walls are still solid, and the steeple still overlooks the town. The rectory is a burnt-out brick shell.

F. School: This is a sprawling, one-story brick building which was also the scene of some fighting, although it is not as badly damaged as the police station. The northwest corner has collapsed, and there are several shell holes through the walls, but the roof is almost completely intact.

G. Apartment Building: These are four-story brick buildings which are mostly intact. There are occasional shell holes, and internal explosions have brought down parts of one floor into another, but the building is still basically structurally sound. Each floor has from four to six apartments on it, each with three to five rooms.

H. Partially Demolished Apartment Building: As entry G above, but the building has suffered enough damage to have lost one or two floors worth of height. There are still occasional jagged wall remnants that reach perhaps one floor higher than the current upper floor. The upper floor is choked with rubble and has partially collapsed into the next lower floor. Most of the internal walls have been damaged, and several of these buildings are burnt-out shells.

I. Store Building: This is about the same size as an apartment building, but there are only two or three stories as the ceiling tends to be much higher. The main part of the first floor is mostly open, with shattered display cases and fixtures littering the floor. The upper floors are divided

into offices and conference rooms.

J. Partially Demolished Store Building: As entry I above, but very heavily damaged. In some cases the entire roof and upper floors have caved in, leaving the shell looking like an open box half-full of rubble. In most cases at least part of one of the interior ceilings is intact, but one or two walls are partially demolished.

K. Small Building: A number of small, one-story brick or stone buildings are in the village. Some of these were shops, while others were private residences. Most of the roofs are collapsed or in poor repair, but the walls are still sturdy.

L. Small Decrepit Building: These are as entry K above, but are in very poor condition. None have a roof, and most are missing part or all of one or two walls. There are also many shell holes through their standing walls. The main function of these buildings is to block visibility; some of them are little more than tall, irregular points in the rubble.

M. Warehouse: This building is two stories tall but has no interior second floor. Instead it has large front doors and loading docks for trucks. Several rusted derelict trucks still sit at the loading docks, and stacks of rotting cartons lie inside the warehouse, filled with upholstered furniture, plumbing fixtures, magazines, or any number of other products.

N. Enclosed Courtyard: These two locations are ideal sites for the slavers to hold their prisoners, and the slavers will pick whichever one is farthest away from the PCs. Access is fairly limited and can be watched. The slavers can remain indoors, out of sight, but keep a watchful eye over their prisoners in the open. At night they will build a fire in the center both to warm the prisoners and illuminate their compound.

Nearby the slavers will have tied their horses and unloaded the supplies. Once the battle is over, sufficient supplies are available to provide the prisoners with several good meals. The slavers' weapons will enable the prisoners to defend themselves on their way back home, and the weakest can ride the horses.

NPCS Slavers

- Two Veteran NPCs with AKMs (four magazines).
- Seven Experienced NPCs with AKMs (four magazines).
- One Experienced NPC with an RPK-74 (six magazines).

Prisoners

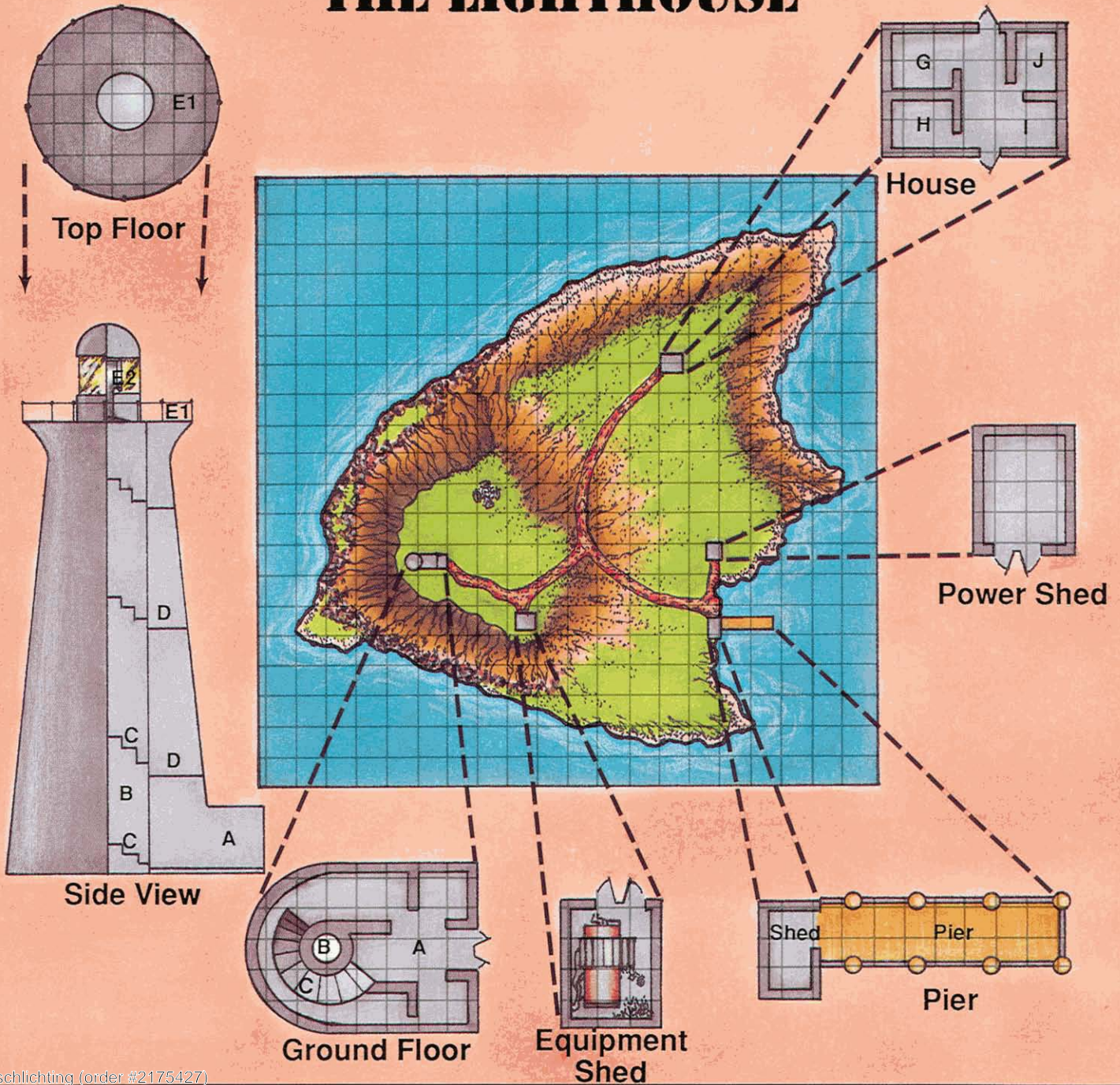
- 100 Novice NPCs, unarmed.

ABANDONED LIGHTHOUSE

Since ancient times, lighthouses have been built to mark hazards and to provide navigational signposts for maritime traffic. In ancient times a lighthouse was a tower atop which beacon fires were kept continually burning. In more modern times, they were converted over to electric power, and sometimes supplemented with foghorns and radio-navigation transmitters. Starting in the last quarter of the 20th century, they were increasingly automated, and the job of lighthousekeeper became increasingly rare.

The lighthouse depicted can be located just about anywhere in the world—the only differences are in climatic adaptations and the language on the dials. Note that lighthouses can be located in rivers (such as the Wisla) or large inland bodies of water (such as the Great Lakes).

THE LIGHTHOUSE



BACKGROUND

The characters learn from local sources that a band of seaborne marauders has been raiding the coast in the area, depressing maritime trade and extorting food and supplies from fishing villages. The tribute they demand has become larger and larger, and the locals cannot pay it any longer.

The fishermen of the area would fight back, but the pirates have a Soviet ZSU-23-4 on their boat, and have demonstrated the fact that they have ample ammunition by totally destroying the first few fishing boats to resist.

APPROACH

Local sources will sketch a map of the island and will be able to describe the buildings there fairly well, but they will know nothing of the pirates' defensive arrangements. The island is approachable only by boat, but the characters may arrive by swimming if they choose (in that case, they will only be able to bring eight kilograms of weapons and equipment per person). The pirates will be able to observe the approach of a boat during the day and will take defensive precautions. Night is a different matter.

Sentries: The pirates have posted sentries walking random routes all night, but they do not cover the cliffs. The chances of a sentry being near enough to spot the characters while they are coming ashore is 25 percent. Otherwise, the characters will be able to land and conceal themselves (after which normal rules about encounter range and surprise apply).

Cliffs: Climbing the cliffs along the shore is a task (ESY: MTN; DIF: AGL if the character has no MTN skill), taking five minutes. Encumbrance makes this task one level more difficult. A character can be hauled up a cliff face in two minutes by rope by another character at the top of the cliff. All times are doubled at night.

MAP DESCRIPTION

Island: The island is a small, mostly rocky body with a high promontory. The only flat place on the island (and the only place with any soil) is the small plateau where the lighthousekeeper (and his family, sometimes) used to live in a small house. This plateau contains several small outbuildings and is located at the base of the small trail that leads up the promontory to the lighthouse itself.

This lighthouse was one of the last to be automated (in 1988), and although the house was emptied of its furniture and supplies, the building was left standing. It now serves as headquarters for the pirates.

Lighthouse: The lighthouse is a brick structure built the late 1920s, although several previous lighthouses had been located on the island long before that.

A. Ground Floor: The ground floor of the lighthouse contains the generator for the light and for the radio-navigation beacon, as well as the automated lighthouse machinery and a small workshop/storage room (A1) with spare parts for the light and the other equipment in the lighthouse. This floor also contains several small storerooms (A2 through A5) and a tiny

bedroom with a cot, a small oil-fired stove, and other leftovers from the 19th century. Several pirates sleep on this floor when they are not keeping watch upstairs.

B. The Central Shaft: This is an open shaft running from the ground floor to the top of the lighthouse. Once used to hoist heavy objects to the upper floor, it is completely enclosed for strength, although there are access doors at every landing in case the hoist jams. It has a large access door at the bottom and top for ease of loading.

C. The Staircase: A spiral staircase runs from the ground floor up to the top of the lighthouse, opening out onto the landings.

D. The Landings: The builders of the lighthouse provided landings to prevent something (or someone) from tumbling the complete length of the staircase. This lighthouse has three such landings D1 through D3).

E. The Top Floor: This floor is very narrow and completely walled in glass, with a narrow walkway around the outside (E1). It contains the light itself (E2), which looks like a huge version of a military searchlight. The machinery which rotates the light is also here, although neither it nor the light have been active since the generator ran out of fuel in 1998. Two pirate sentries keep watch from the walkway both day and night, ready to give the alarm with flare pistols.

Radio-Navigation Tower: In 1971 a radio-navigation tower was built on the island, linking it into a worldwide radio-navigation network. It is nonfunctional at present, but the electronics are largely intact.

Power Shed: The lighthouse and radio beacon are automated and powered by electricity brought from the mainland via a subsurface cable. The lighthouse and the radio-navigation beacon still have backup generators on the island in case of an interruption in power. When the nuclear strikes cut off external power, the automatic machinery took over, and the equipment ran for several months until the generators ran out of fuel. The generators are 1500 kw each, weigh one ton each, and are in good condition (the marauders have no fuel for them).

This shed contains the junction for the island's connection to the submarine power cable and two emergency backup generators. An underground fuel tank (now empty) is located near the shed (its only surface feature is a vent and an access cap).

F. Equipment Shed: This shed is empty, but serves as shelter for eight marauders.

House: The house is a small brick structure, built in the late 19th century to provide a dwelling for the lighthousekeeper. An addition was added in 1952, when the resident keeper decided to bring his family to the island and needed a larger house. It is a one-story, two-bedroom structure with a small storm cellar. When automated machinery was installed in the lighthouse in 1988, the house was abandoned and served no purpose except as a storage facility for spare parts. It was kept up to serve as an emergency shelter should inclement weather strand the inspection and

maintenance personnel who visited the island periodically to refuel the generators and keep the equipment functioning. At present, the house shelters the bulk of the pirate band's personnel and serves as their armory.

Behind the house, sheltered from the prevailing wind and on a sunny exposure, are the remnants of a small garden. This once provided fresh vegetables for the occupants and contained a few flowers as well. The plants have gone wild, and weeds have reclaimed the garden, but a few of the hardier flowers still remain. These bright spots on an otherwise drab rock outcropping are a testimony that someone who appreciated beauty once lived here. The pirates have yet to notice.

G and H. Bedrooms: These are empty except for the pirates' personal possessions.

I. Kitchen: This room contains a sink and a pump, connected to a cistern (the island has no well).

J. Pantry: This now serves as the armory for the pirates.

Pier: A small pier is located on the leeward side of the island (the side sheltered from the predominant winds). The pier was maintained for the use of the island's inhabitants, and was kept in good repair after the lighthouse was automated to facilitate the landing of bimonthly inspection and maintenance teams. The pier currently serves as anchorage for the pirates' two vessels. Two sentries are on duty here permanently.

Armed Boat: The pirates have possession of a terror weapon, a ZSU-23-4. They have mounted it on the foredeck of an old fishing boat and use the threat of the weapon to extort a living from regional fishing villages. The weapon is seldom fired, largely because its mere presence is so intimidating. The pirates are running short on ammunition for it, but this is a secret they are not anxious to let out.

Unarmed Boat: In addition to the armed fishing boat, the pirates have a small sporting sailboat, which they use for occasional trips to pick up tribute from submissive villages.

NPCS

This adventure requires no specific NPCs.

The Pirates

The island contains 30 fighters at any given time, not including another half dozen or so noncombatant hangers-on. The pirates have three Elite (the leadership), six Veteran, 12 Experienced and nine Novice NPCs. The pirates' main weapon is a single ZSU-23-4 gun looted from a Soviet AA battery, for which the pirates have only 360 rounds (90 per barrel) remaining. In addition to the Zoo (as it is nicknamed), the pirates have a dozen AK74s, six M16s, four MAG MGs, one M60 MG, four double-barrelled shotguns, and a dozen pistols of assorted types. Ammunition is short (less than 60 rounds per weapon), and the pirates are conservative about their firing. The characters should not know this going in, however.

The referee may wish to vary the number and armament of the pirates for play balance.

WHAT'S POLISH FOR G'DAY?

Fortified villages can be found anywhere, so this adventure can be set anywhere you wish. And when you're done with it, you can use the map as a good generic village for when you need a map but don't have time to make up a whole settlement.

*Some of the background to this adventure is perhaps a little bizarre. But a **Twilight: 2000** campaign should be unpredictable and, once in a while, a little unusual.*

BACKGROUND

The PCs are approached by the refugees from a nearby village which was recently captured by a band of Soviet deserters (this adventure can be used as the result of a normal refugee random encounter, if desired). Many of the village's citizens are still in the village, held prisoner by the deserters, while many others have been killed or abused in various ways. The deserters are mostly drunk and looting; a well disciplined and armed force could recapture the village and drive away the criminals. The village would be very grateful for the PCs' help, and could provide them with food, alcohol, and even a little gold, if necessary. The deserters have good weapons and ammunition, which the PCs could take as well.

If questioned, the villagers can provide fragmentary information on the attack and the deserters. There are perhaps 20 deserters, with several motor vehicles but no armored vehicles. The villagers saw no weapons other than small arms, but who can say what is in the trucks? The deserters gained entry to the village by treachery, having apparently bribed several members of the village militia to open the gates and let them in. Resistance was unorganized, and the few men who armed themselves were quickly gunned down. Most of the people were rounded up as prisoners; only this small band escaped.

Several of the men know the way through the village's minefields, so a stealthy approach will be possible. This situation is just the sort of thing PCs simultaneously relish and dread. There is plenty of danger here, but it's for a good cause and has a possibility of a substantial reward when it's all over. The referee may need to increase the promise of reward a bit, but probably not very much.

APPROACH

That night the PCs make their quiet approach to the village, accompanied by the six village men and women who are of military age and in good enough health to be of assistance. As the player characters view the village from the shadows of a low woods, they can see the flicker of flames from behind the village's walls and hear the sound of raucous celebration, occasional gunshots, women's screams, and what sounds like a recording of the Red Army Chorus singing military tunes through a public

address system at peak volume.

One of the refugees points to the base of the wall and says, "The minefields are each about 30 meters long. There is a field to either side of the road where it enters at each end of the village, and three more fields, evenly spaced, on each of the other two sides of the village."

"Two fields," another refugee puts in. "There are only two fields on each side, evenly spaced, like you said, but just two fields."

"What do you mean, two fields? I saw the plans myself, when old man Stranksi drew them up!"

"What do I know from plans? But whose brother-in-law dug the fields? Mine, that's who, and there weren't enough mines for three fields. So they only dug two."

"Your brother-in-law? Your moron brother-in-law who bought the two breeding mules?"

By now the argument will have begun to become loud and heated, and the PCs will have to quiet the two villagers. Careful questioning of the other villagers with them will reveal that none of them actually worked on the minefields, and none know for sure how many minefields there are and whether they are evenly spaced after all.

While the PCs give some thought to what their next move should be, they will hear "pst!" from about one meter away in the undergrowth. When they look that way, they will hear a clearly Australian voice say, "You better have your mates there quiet down, or we'll all be in the soup, trooper. You blokes need a hand?"

SAS to the Rescue: The men who approached to within a meter or so of the group undetected are a four-man Australian SAS patrol. The PCs will undoubtedly have a number of questions. The Australian SAS men will answer their questions in good humor, but without revealing much of value about what is obviously a top-secret, clandestine operation.

What are they doing here in Poland? "Had to make a pickup, sort of. Like a postman, see? Only different."

How did they get here? "Walked. Course, the sub was a big help, too."

An Australian submarine in the Baltic? "No. French, actually. Pretty nice bunch of blokes, too, if you ask me."

Why were the French helping? "Oh, you know. 'Hands across the water,' all that. Sort of an international brotherhood out there now,

you know—like the Organization of Nonirradiated Nations."

Most of these will be accompanied by laughter from the rest of the SAS patrol. But when the PCs ask them why they're willing to help, they'll all get more serious. "Well, that's plain enough. They've got one of our mates in there, see? And we're gonna bring him out."

Reliable Sources: The Australians have been watching the village from various points for several hours and waiting for an opportunity to make their move. Based on their observations, they will be able to provide the PCs with some additional information.

First, there aren't 20 deserters in the villages. It's more like 40. Also, they aren't all deserters, strange as that sounds. A small GRU (Soviet military intelligence) detachment is travelling with them. Since the deserters are moving back to the Soviet Union anyway, the GRU officers have decided to accompany them and offer them amnesty in return for protection.

The GRU detachment is holding the Australian SAS man prisoner.

Next, the minefields. There are two per side, not three. They are not evenly spaced, but they are each about 30 meters long and about half that in depth. How can they tell?

"It's as plain as the nose on your face, sport. Look down there at the base of the wall. See those patches of real tall grass? Those are your minefields. You wouldn't catch me pushing a lawn mower over a live minefield."

Finally, guards. Two guards are posted in each of towers one and four, with one additional guard each in towers two and six. There also appears to be a guard on the roof of the police station.

It's now up to the PCs to plan their assault. The SAS troops will go along with most plans, and the referee can use them to offer helpful tactical advice. The SAS men are interested in recovering their missing member, but since there is obviously going to be a serious fight here, they feel they owe it to the Americans and their villager allies to fight it through with them.

MAP DESCRIPTION

A. Horse Corral: About 30 horses are penned in here—all the draught animals and riding horses the village owns. They will be nervous because of the unaccustomed commotion and the obvious tension among their masters, and will spook or stampede easily.

B. One-Story Brick Building: A shop or residence, now deserted. On a 1D6 roll of 1, a drunken deserter is sleeping in the building.

C. Two-Story Brick Building: An apartment building, sometimes with a shop on the first floor. It's deserted. On a 1D6 roll of 1, a drunken deserter is asleep in the building.

D. School: This is a large, brick, two-story building with a lot of windows. Many of the Soviet deserters are using this as quarters. Ten are asleep, and 10 others are drinking and listening to music. Four of the village women are held prisoner here as well.

E. City Hall: This is a two-story concrete building with broad steps leading up to the double front doors. Most of the surviving villagers (about 200) are held prisoner in the basement of the city hall. Two armed soldiers are awake on the main floor as guards.

F. Police Station: This is a three-story concrete building. The GRU detachment is quartered here, and the Australian SAS man is held in a cell in the basement. Two officers and two enlisted men are asleep on the second floor, and one private is on guard on the roof.

G. Warehouse: The village's produce and trade goods are kept here in this large, two-story brick building. It has been looted, and much of the food has been ruined by drunken deserters.

H. Village Square: This is a cobblestone plaza in the center of town with a small fountain. The fountain has been knocked over by a five-ton truck. Two five-ton trucks, one 2.5-ton truck, one three-quarter-ton truck, and one UAZ-469 are parked at random angles in the plaza.

I. Church: The large brick and stone church has windows along each side, but they are so high up off the floor that it is difficult to see out. The steeple is the tallest point in the village. No one is in the church at the present.

J. Rectory: The living quarters of the village's priest are deserted.

K. Mayor's House: The sergeant leading the deserters is asleep here.

L. Village Wall: This wall is about six meters thick at the base and about half that at the top. It is made of stone, rubble, and piled-up dirt. There is a low breastwork around the outside top with a two-meter-wide firing step behind it. Seven timber guard towers (labeled T1 to T7) are scattered along the wall, each one about six meters tall, with the outside face protected by sandbags.

M. Tall Grass: Each patch of tall grass covers an antipersonnel minefield with a density of one mine per grid square.

REFEREEING THE ATTACK

Although the odds may seem intimidating, the PCs and their allies have everything on their side except for numbers. They are probably better equipped, have the benefit of surprise, are concentrated, and are probably better fighters.

Unless they make a terrible blunder or suffer extraordinarily bad luck, the trick to this attack will not be winning but rather will be to do so with minimum casualties.

The first part of the attack will involve crossing the wall. PCs and/or SAS troops may attempt to sneak up and silence a guard. They will have to crawl forward and make a task roll (AVG: RCN) in each grid square they enter to avoid detection. Each level they climb will require an additional roll, and rolls made in the

same grid square as the guard become DIF: RCN. If the guard detects them, he will fire a warning shot to alert the other guards, and surprise will be lost. Otherwise, he can be silenced using body or melee combat attacks.

The PCs can move cautiously through the streets at the walking movement rate, again rolling AVG: RCN to avoid detection if a soldier is in a position to see them.

Once the alert is sounded and gunfire begins, soldiers will begin waking up, and those who are already awake will grab their weapons. When the alert is sounded, the referee secretly rolls 1D6, the result being the number of complete combat turns that pass before the soldiers who are awake at the school realize what is happening, arm themselves, and shout to the sleeping soldiers to wake up. At the end of that time, the soldiers at the school will begin firing from the windows at any visible troops. If they do not see any, they will run from the building in the direction of their vehicles in the plaza.

At the same time that he rolls for the school soldiers, the referee should roll a separate 1D6 for the GRU detachment at the police station, the result being the number of turns it takes for them to wake up, arm themselves, and begin moving. They will move to the roof (after posting a guard at the front door), go into the plaza to rally troops, or take whatever other action the referee deems appropriate.

After the already awake school soldiers are fully armed, the referee begins rolling 1D6 at the beginning of each combat turn, the result being the number of additional sleeping soldiers in the school who become available. This continues until all the soldiers in the school are awake and armed. Each waking batch of soldiers will either fire out of windows or run after the other soldiers toward the plaza, at the referee's option. In any event a good deal of random automatic weapons fire will probably be directed at shadows and dark alleys.

Eight soldiers sleeping in scattered buildings throughout the village will begin waking up at the rate of one per combat turn, beginning at the same time that the school soldiers wake up. The referee may roll a die to randomly place these men, or he can arbitrarily place them. In all likelihood the men closest to the firing will wake up first.

The soldiers awake and on guard duty will be ready to move as soon as the alert sounds. Where two men are posted together, one will remain at the post while the other goes to "find out what's going on." If only one man is at a post, he will probably remain there, at the referee's option.

Sergeant Bolukov (leader of the deserters) is at the mayor's house. He will wake up, arm himself, and begin moving six full combat turns after the alert sounds.

NPCs SAS Patrol

- One Elite NPC with an M16A2, and two each of smoke and frag grenades.

- Three Elite NPCs with Sterlings, and two each of smoke and frag grenades.

Villagers

- One Experienced NPC with a Tokarev (two magazines).

- One Novice NPC with a double-barrelled shotgun (six cartridges).

- One Novice NPC with a .22 automatic (one magazine).

- One Novice NPC with a knife.

- One Novice NPC with a spear.

- One Novice NPC with a club.

(The PCs may, of course, loan any extra weapons they have to these NPCs.)

Deserters In Guard Towers

- Six Experienced NPCs with AK-74s.

Deserters in City Hall

- One Experienced NPC with an AKR.

- One Veteran NPC with an AK-74.

Drunken School Deserters

- Eight Novice NPCs with AK-74s.

- One Novice NPC with an RPK-74.

- One Veteran NPC with an SVD sniper rifle.

Sleeping School Deserters

- Six Novice NPCs with AK-74s.

- Two Novice NPCs with AKRs.

- One Novice NPC with a PK machinegun.

- One Novice NPC with a Makarov.

Sleeping Town Deserters

- Eight Novice NPCs with AK-74s.

Sergeant Bolukov

- An Elite NPC with a Tokarev.

Bolukov is the leader of the deserters by virtue of his strength, fighting skills, and homicidal nature.

Once the fighting begins, he will rally the deserters to overcome the attackers or fight their way out. If Shumilov argues with him, Bolukov will probably try to kill him.

NPC Motivation Results: *Club King:* Brutal. *Spade Queen:* Ruthless.

GRU Detachment

- One Experienced NPC with an SVD and two frag grenades.

- Two Experienced NPCs with AKRs and two frag grenades.

- One Experienced NPC with a Makarov and one frag grenade.

Major Shumilov

- A Veteran NPC with a Makarov and an AKR.

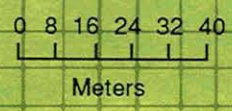
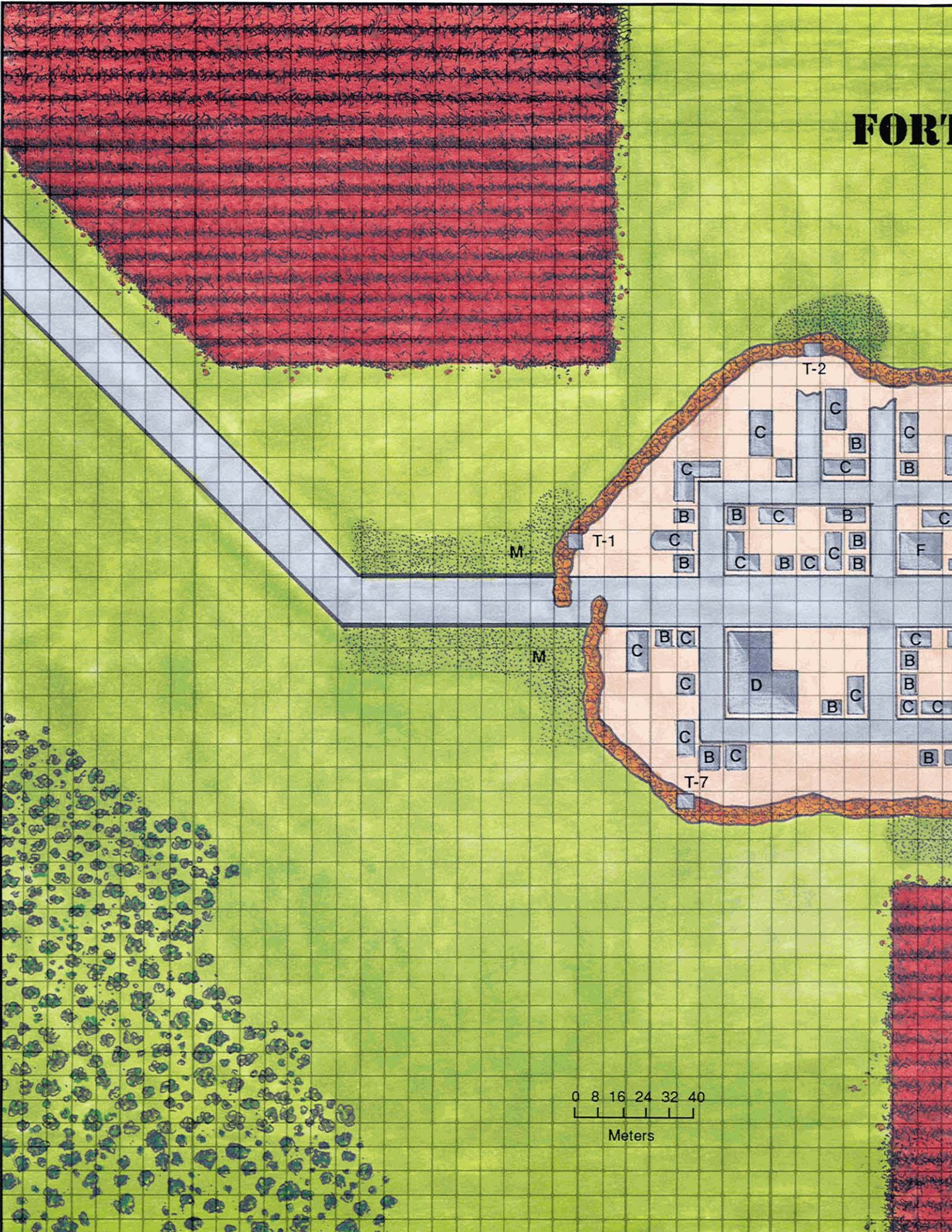
Shumilov is a major in the Soviet GRU.

Although the SAS prisoner has thus far revealed nothing of importance, the fact that an Australian commando has been captured is important enough to provide Major Shumilov with an excuse for leaving Poland to report to Moscow.

If he can make it home in one piece and hang onto the Australian prisoner, then Major Shumilov will be a hero once he reaches Moscow.

NPC Motivation Results: *Diamond King:* Selfish. *Club 5:* Aggressive.

FORT



IFIED VILLAGE

Earthen Wall & Guard Tower

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Meters

