
SECOND EDITION



**COMPUTER
AMBUSH**TM

**RULE BOOK
and
SOLDIER DOSSIERS**



STRATEGIC SIMULATIONS INC.

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"Thus those unable to understand the dangers inherent in employing troops are equally unable to understand the advantageous ways of doing so."

— SUN TZU (approx. 500 B.C.)
The Art of War

1.0 GENERAL DESCRIPTION

COMPUTER AMBUSH is a simulation of squad versus squad combat in France during World War II. The game scale is 3 meters per square and one second per 10 time points.

You will notice while reading the rules that we do not divulge all of the mathematics behind the game. We have done this intentionally in order to create as much uncertainty as possible in the players' minds. By playing the game many times, you will begin to get a feel for what to expect, but you will never know *for sure*. Thus we have here a game that truly creates the "fog of war".

1.1 Parts Inventory

- A. Box
- B. Rule Book
- C. 5½-inch game disk
- D. Two Mapboard Cards
- E. Two Squad Cards
- F. Two Grease Pencils

1.2 Mapboard Codes

PRK...	— First letter of last name of a friendly soldier
	— An American soldier as seen by the German player
	— A German soldier as seen by the American player
	— An enemy soldier in shock (50 or more wound points)
	— An enemy soldier that is dead (99 wound points)
	— Wall
	— Window
	— Door
	— Hedge
	— Interior of a building
	— Rubble
	— Statue

1.3 Passwords

At the start of each game both players will be required to enter a five-character password. It is important that each player keep his password to himself. This will ensure that secret information held by the computer is given only to the appropriate player.

1.4 Saving a Game or a Squad

A decision must be made at the end of each turn whether or not to "save" the game. Saving a game allows you to restart the game at a later date from the point at which you left off. You are also given the opportunity to 'save' a squad of soldiers with non-standard names and characteristics (see sections 13 and 14). Saving a squad allows you to use the same non-standard soldiers in more than one game. In order to 'save' a game or a squad, you must first 'initialize' a SAVE disk. This means that

you MUST have a pre-initialized disk available before you start any game you think you might want to save (see section 14).

1.5 Mapboard Coordinates

To read the map coordinates, first read the column number and then the row number. Example: *The statue is on column 30 and row 43, and thus it is in square 3043.*

1.6 Setting Up the Game

To prepare for play, refer to the game scenarios listed in section 16. This section describes the 12 different **COMPUTER AMBUSH** games available, including the objectives for both players. If this is your first game, we suggest that you play the NCO training scenario while reading the rest of the rules.

1.7 Talking to the Computer

After a command is given to the computer, terminate the command by pressing the "RETURN" key. The return key is indicated in the rulebook by the symbol "(CR)" which stands for carriage return. This rulebook is intended for use with both the Apple and Atari versions of **COMPUTER AMBUSH**, which are essentially identical. Nevertheless, there are editing features in the two computers which necessitate different descriptions in three sections: *section 1.7, section 13.1, and section 13.2*.

1.7.1 Apple Version

If you make a mistake while entering a command, you may use the "back arrow" to go backwards, then type over the mistake. *NOTE: If you are playing on the Apple IIe computer, keep the "CAPS LOCK" key pressed down.*

1.7.2 Atari Version

If you make a mistake while entering a command, you may use the "DELETE" key to erase the last character typed. The "shift-DELETE" key will erase all characters typed since the last (CR). **COMPUTER AMBUSH** does not allow more than 10 characters to be typed at one time. Inverse characters are never allowed; lowercase letters are allowed only when changing your soldiers' names (see section 13.2.2).

2.0 GETTING STARTED

To begin playing, insert the **COMPUTER AMBUSH** diskette into the drive and turn on your computer. In a few seconds, an American and a German soldier will be displayed on your screen. Press any key to start the game.

2.1 Menu Options

You will be asked to choose one of four options from a listed menu. These options are: 1) perform disk management (section 14), 2) generate a squad of soldiers (section 13), 3) start a new game, and 4) restart an old game. If you choose either of the first two options, you will later return to the menu, allowing you to start a game if you desire. However, if you choose options 3) or 4), you will begin playing **COMPUTER AMBUSH** and will not return to the menu. This means that you cannot initialize a SAVE disk nor generate a non-standard squad of soldiers after a game has begun. If you choose to start a new game, you will enter the Scenario Selection Phase.

2.2 Scenario Selection Phase

The purpose of this phase of COMPUTER AMBUSH is to allow you to select the game you wish to play. This phase will be executed only once at the beginning of each new game. You will choose from a selection of five solitaire scenarios or seven two-player games (see section 16). If this is a two-player game, the two players must decide who will play each side and enter passwords when asked. The player(s) will then select his squad of soldiers (with either standard or non-standard soldier characteristics) and place them on the map. Each player will also choose to either accept the standard weapon allocation (section 11.1), or to allocate weapons to his soldiers himself. This gives a player the opportunity to match weapons according to the strengths and weaknesses of his soldiers, and can often mean the difference between victory and defeat. You may get a 'hard-copy' listing of your squad's characteristics and weapons distribution if you desire (and if you have a printer!).

2.3 Sound or Silence?

After the game scenario has been chosen, the computer will ask if you desire to play a quiet game or a game with sound effects. If you play a game with sound, the computer will play 'music' whenever introducing a new phase of the game, and voice its dissatisfaction on input errors. (NOTE: this question does not refer to battlefield sounds – see section 3.3). A quiet game will let you play late at night without disturbing (pick one) parents, roommate(s), or spouse!

2.4 Blind or Unlimited Sight?

You must also choose whether you will play a 'blind' or an 'unlimited' game. In simplest terms, an unlimited game means that the American player can see all the German soldiers in the game, and the German player can see all the American soldiers in the game. A blind game, on the other hand, is more 'true-to-life', since a player will see only those enemy soldiers that his own soldiers see. The factors which determine whether an enemy soldier is seen or not during a blind game are described in section 10. A blind game clearly adds to the challenge of COMPUTER AMBUSH.

NOTE: All solitaire games played at skill level three are blind (see section 16).

2.5 How Many Time Points?

The last question you must resolve in the Scenario Selection Phase is the number of time points you wish to simulate during the first turn. You may choose any number of time points between 1 and 250 (that is, between 0.1 and 25 seconds). The computer will also ask this question at the end of each turn.

3.0 SEQUENCE OF PLAY

COMPUTER AMBUSH is played in a series of turns until one or both sides have completed their missions or until one side is totally destroyed. Each turn follows a standard pattern of phases.

3.1 American Order Entry Phase

During this phase the American player may give orders to his soldiers (section 5), obtain a status report about a soldier (section 6), obtain the characteristics of his squad, or get a view of the mapboard. Each time an order is written, the estimated time and energy required to execute that order will be subtracted from the total available to that soldier. Thus, you will have a fairly good idea of what your soldier can accomplish during this turn. It is always possible during this phase to change the orders given to your men. No orders are final until the player ends the phase.

3.2 German Order Entry Phase

The German player gives orders to his soldiers. If you are playing a solitaire game, the computer will give orders to the German soldiers.

3.3 Computer Resolution Phase

During this phase the computer executes the orders given by the players. The computer resolves all of the action with total simultaneity. (If your soldier has greater dexterity and intelligence than his opponent, he will fire the first shot, unless he has a rifle vs. a machine gun, etc.) The computer will first ask if you want to hear the sounds of battle (gunfire, hand grenade explosions, screams, etc.) or the sounds of silence. Opting for sound effects will cause the Computer Resolution Phase to take longer, since the computer can't process the orders you have given your soldiers while it is producing sounds.

3.4 American Report Phase

During this phase the American player may view a 'movie' of the events of the turn just completed. The movie will show the movements of soldiers across the mapboard as well as any fire and explosives attacks that take place. By displaying the (A)ction during this phase the player will see the location of all soldiers that were spotted at any time during the turn, even if they were subsequently lost. By displaying the (M)ap, the player will see the final location of all the soldiers that he can see. The player may also obtain the characteristics of his squad during this phase.

3.5 German Report Phase

The German player is allowed to see the results of the turn just completed.

3.6 Save Game Phase

This phase marks the end of the current turn. It is at this time that you can save the game in progress for resumption at a later time. The computer will also ask you how many time points you wish to simulate on the next turn.

3.7 Repeat steps 3.1 – 3.6 until a victor is declared.

4.0 SOLDIER CHARACTERISTICS

COMPUTER AMBUSH is a game dealing with individual combat, and, because of this, you will need to familiarize yourself with the characteristics of your men. These characteristics should be carefully considered as you deploy and use your troops. You can find the standard characteristics of each man on the squad cards provided with the game. You are also given the opportunity to have the computer generate a random set of characteristics for your soldiers (see section 13). The following is a discussion of what each characteristic represents and how it is used in the game. NOTE: The abilities listed in 4.3 – 4.10 are on a scale of 1 – 10, with 1 usually meaning 10% and 10 usually meaning 100%.

4.1 Rank

The ranks of the soldiers are as follows: sergeant (sgt), corporal (cp), private first class (pfc), and private (pvt) for the Americans, and feldwebel (fw), unteroffizier (uo), obergefreiter (og), and gefreiter (gf) for the Germans. The highest ranking soldier in a squad is considered to be the squad leader. Thus when Padooka is used in a game he is the American squad leader. If he becomes dead or in shock, then the next higher ranking soldier will assume squad leader status. For example, if all ten soldiers were being used and Padooka and Richfield were both in shock, then Bastinelli would become the American squad leader. The squad leader has an effect on the command control ratings (section 6.7) of the other soldiers in the squad. Also, higher ranking soldiers will usually have higher command control ratings.

4.2 Name

Each friendly soldier is represented on the screen by the first letter of his last name. This letter is also used by the player to indicate to the computer which soldier is being referred to for order writing or status checks.

4.3 Body Weight

This characteristic is the weight of each soldier. Each unit of body weight is equal to 10 kg (22 lbs.).

4.4 Physical Strength

The number in the physical strength column is the percentage of a soldier's own body weight that he can carry. This characteristic is used to determine the amount of endurance and energy points the soldier receives at the beginning of each turn. The higher a soldier's strength the more he will be able to do before he becomes fatigued.

4.5 Intelligence/Combat Reflexes

The combination of intelligence, training and combat experience is represented by this figure. The higher a man's intelligence/reflexes the faster that man will execute his orders. Thus a man with high intelligence will take less than the normal amount of time points to carry out his orders, while a man with low intelligence will use more time points to execute the same order.

4.6 Dexterity

This characteristic reflects the soldier's ability to move swiftly. As with intelligence, the higher a soldier's dexterity, the less time points the soldier will use when executing his orders.

4.7 Power of Observation

The combination of a soldier's basic awareness and his eyesight, this figure is used by the computer to determine whether a man spots enemy soldiers in his field of vision (see section 10.3).

4.8 Throwing Marksmanship

This characteristic represents the soldier's ability to throw a grenade. A high marksmanship rating will increase the accuracy of the throw.

4.9 Firing Marksmanship

This characteristic represents the soldier's ability to hit a target with his fire weapon. A rating of 6 would indicate that the soldier has a 60% chance of hitting the target before accounting for the accuracy of the weapon being fired, defensive terrain, etc.

4.10 Ability in Hand-to-Hand Combat

A soldier's basic ability in hand-to-hand combat.

4.11 Demolitions Expert

Even though any soldier may carry the plastic explosive, only one soldier per squad has enough expertise in explosives to qualify as a demolitions expert, and therefore has the ability to detonate a plastic explosive safely. However, if the demolitions expert is dead or in shock, then the squad leader may attempt to detonate the plastic explosive (see section 12.7). In the standard squads, the American and German demolitions experts are Cheng and Wagner, respectively. If you use a computer-generated squad, you decide which soldier is your demolitions expert. Because you may also allocate weapons to your soldiers (section 11), it is possible to start a game with a demolitions expert, but not have a plastic explosive; or have a plastic explosive, but not have a demolitions expert. In the latter case, the squad leader could attempt to detonate the plastic explosive (see sections 11.2 and 12.7).

5.0 ORDERS: WHAT THEY ARE AND HOW TO USE THEM

During each player's order entry phase, the player may order his soldiers to perform a combination of tasks. Each soldier begins every turn with a number of energy and time points. The energy and time points required to perform a task are given on the squad card. These costs are the cost for an average soldier (that is, a soldier who rates 5 in all categories). When a player writes an order for one of his soldiers, the soldier's energy and time

points will be displayed on the screen. After each order is given, energy and time points required to complete the order will be subtracted and new totals will be displayed on the screen. This allows a player to monitor the approximate number of orders his soldier can accomplish during the current turn. (The number is 'approximate' because factors which affect the time required to execute an order may change during the computer resolution phase.) The computer reserves an identical amount of space to store each soldier's orders. A player may continue to write orders for a soldier until that space is filled. This means that a soldier may receive further orders even though his time and/or energy fall below zero.

5.1 Execution of Orders / Insufficient Time

During the computer resolution phase, a soldier will execute the orders given to him in the order entry phase provided that he has the requisite time and/or energy. (NOTE: *This assumes, of course, that your soldier was not shot, forced to defend himself from a charging enemy, etc.*) If a soldier does not have sufficient time to execute an order during the computer resolution phase, the computer will advise the player during the next order entry phase on how much additional time is required to execute that order (see section 6.10). The player may then choose to either 1) write (N)ew orders, 2) (L)eave the current orders, or 3) (A)ttach new orders. If (N)ew orders are written, the old orders list is obliterated. If you (L)eave the orders list as is, the soldier will continue to complete the original set of orders during the subsequent computer resolution phase. If a player chooses to (A)ttach new orders, the player can append new orders to the first order in the list (that is, only the first order in the list is kept). This option allows a player to alter his strategy without 'wasting' the time already spent by the soldier in 'partially' executing an order.

5.2 Execution of Orders / Insufficient Energy

A soldier cannot execute an order in the computer resolution phase if he has insufficient energy to do so. Whenever this occurs, the soldier's orders list is cleared and he will be unable to do anything more until he regains additional energy at the beginning of the next turn (see section 6.6). It is usually poor strategy for a player to drive his soldiers so hard that they become completely fatigued. Obviously, such soldiers are extremely vulnerable.

5.3 Execution of Orders / Redundant Orders / Impossible Orders

The computer will not allow a player to write obviously 'redundant' orders during the order entry phase. For example, a soldier who is already sneaking, cannot be given another 'sneaking begin' command. Nevertheless, circumstances may occur during the computer resolution phase which makes a legitimate order, redundant or impossible to execute. For example, a soldier fell prone after being wounded by enemy gunfire; an order to have him fall down would obviously be redundant. As another example, a soldier is ordered to pick up a rifle in the square in which he is standing; however, there is no rifle in the square. Clearly, this order is impossible to execute. In such circumstances the computer ignores the redundant or impossible order, and executes the next order on the list. Except for the 'Get' (section 7.1) and the 'Load' commands (section 12.5), attempted execution of orders impossible to carry out, do not cost the soldier any time or energy points. The following is a complete list of the orders that may be given.

5.4 MRdnm — Move regular in direction "d" for "n" squares in mode "m". While moving regular a soldier will face in the direction that he is moving.

5.5 MIdnm — Move irregular in direction "d" for "n" squares in mode "m". While moving irregular a soldier will remain facing in the same direction in which he was facing before the movement order was given.

5.6 SB – Sneaking begins. When given this order a soldier will begin sneaking and will continue sneaking while executing further orders until he fires a weapon or is given an SE order.

5.7 SE – Sneaking ends. When given this order a soldier will stop sneaking.

5.8 PA – Prepare automatic rifle/sub-machine gun. A soldier given this order will unsling his automatic rifle/sub-machine gun and prepare it for use. A soldier may not fire an unprepared weapon nor may he use it in hand-to-hand combat.

5.9 PB – Prepare bayonet. A soldier given this order will attach his knife to his rifle so it may be used as a bayonet in hand-to-hand combat.

5.10 PF – Prepare fragment grenade. A soldier given this order will pull out a hand grenade and place it in his hand so that he may throw it when so ordered.

5.11 PG – Prepare garotte. When given this order a soldier will pull out his garotte and prepare it for use.

5.12 PK – Prepare knife. When given this order the soldier will pull out his knife and keep it in his hand ready for use.

5.13 PM – Prepare machine gun. A soldier given this order will prepare his machine gun for use.

5.14 PP – Prepare plastic explosives. A soldier given this order will prepare his plastic explosives for use.

5.15 PR – Prepare rifle. A soldier given this order will unsling his rifle and prepare it for use.

5.16 LA – Load automatic rifle/sub-machine gun. A soldier given this order will load his automatic rifle/sub-machine gun.

5.17 LM – Load machine gun. A soldier given this order will load his machine gun.

5.18 LR – Load rifle. A soldier given this order will load his rifle.

5.19 GA – Get automatic rifle/sub-machine gun. A soldier given this order will pick up an automatic rifle/sub-machine gun if it is in the same square as the soldier. (*i.e., either on the ground or carried by a soldier who is dead or in shock*).

5.20 GF – Get fragment grenade. A soldier given this order will pick up a hand grenade if it is in the same square as the soldier.

5.21 GG – Get garotte. When given this order a soldier will pick up a garotte that is in the same square as the soldier.

5.22 GK – Get knife. When given this order a soldier will pick up a knife that lies in the same square as the soldier.

5.23 GM – Get machine gun. When given this order a soldier will pick up a machine gun that lies in the same square as the soldier.

5.24 GP – Get plastic explosives. When given this order a soldier will pick up a plastic explosive that lies in the same square as the soldier.

5.25 GR – Get rifle. A soldier given this order will pick up a rifle that lies in the same square as the soldier.

5.26 DA – Drop automatic rifle/sub-machine gun. A soldier given this order will place an automatic rifle/sub-machine gun on the ground.

5.27 DF – Drop fragment grenade. A soldier given this order will drop an unprepared hand grenade.

5.28 DG – Drop garotte. When given this order a soldier will drop a garotte on the ground.

5.29 DK – Drop knife. When given this order a soldier will drop a knife on the ground.

5.30 DM – Drop machine gun. When given this order a soldier will place a machine gun on the ground.

5.31 DP – Drop plastic explosive. When given this order a soldier will place a plastic explosive on the ground.

5.32 DR – Drop rifle. When given this order a soldier will place a rifle on the ground.

5.33 FS_{xxyy} – Fire a single burst at an enemy soldier in square "xxyy".

5.34 FAp_{ttt} – Fire on any target that enters the area which you are facing, within 'tt' time points, but only if the percentage chance of hitting the target is greater than 'pp'. FA orders may not be given for less than 10 time points.

5.35 HH – Engage in hand-to-hand combat. A soldier given this command will engage in hand-to-hand combat with any enemy soldier in his square.

5.36 HJ_{ttt} – Wait 'tt' time points ('tt' must be between 10 and 99 time points) for an enemy soldier to enter an adjacent square and then jump to the square and engage in hand-to-hand combat with the enemy soldier.

5.37 EP_{ttt} – Set your plastic explosives to explode in 'tt' time points and then place the explosives in the square you are currently in.

5.38 EF_{xxyy} – Throw hand grenade to square "xxyy". All fragment grenades have an automatic fuse setting of 04 time points, thus 04 time points after the grenade lands in the target square the grenade will explode.

5.39 WA_{tt} – Wait 'tt' time points before executing any further orders. WA commands must be given for at least 10 time points.

5.40 NL – List the current orders list of the soldier you are currently giving orders to. This 'order' gives a player an update of the orders given to a soldier. Additional orders may be given to a soldier after an NL has been executed.

5.41 FS_{xxyyL} – Same as FS_{xxyy} except that the computer displays the terrain multiplier used in determining the probability of hitting an enemy in the target square (*see section 10.4*). This is a special order designed to help novices understand the effects of terrain. Thus, the computer will accept this order only if you are playing the 'NCO Training' scenario or any level 1 solitaire game (*see section 16*).

5.42 NO – To end writing orders for a soldier.

6.0 STATUS REPORT

A status report for any friendly soldier is available at any time during a player's order entry phase or report phase. The report contains information on the current status of the soldier.

6.1 Wounds

The number of wounds is the percent of wounds received by the soldier compared to the number of wounds needed to kill the soldier. At 50-98 the man is in shock and will accept no further orders. A soldier is considered dead when his wounds reach 99.

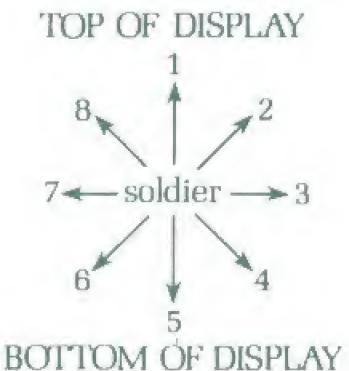
Wounds effect the number of endurance points and energy points received by each soldier at the beginning of each turn.

6.2 Position

This is the x,y coordinates in which the soldier is currently located (during the order entry phase this position is the position as of the beginning of the turn).

6.3 Facing

This is direction in which the soldier is facing at the beginning of the turn.



In addition to the 8 directions on the map a man may have a facing of "0" or "9". A "0" indicates that the soldier is scanning in all 8 directions and a facing of "9" means that a soldier is in hand-to-hand combat and thus is too busy to look for other enemy soldiers. The facing of a soldier determines who that soldier may see.

6.4 Posture

The letter indicates the posture of the soldier:

- U – upright
- P – prone

6.5 Sneaking

This indicates whether a soldier is sneaking

- Y – Yes
- N – No

6.6 Endurance

Endurance is a measure of how tired each soldier is. Each soldier starts the game with 99 endurance points. When a soldier's endurance reaches 0 he is considered fatigued and may not carry out any other orders until he has regained some of his endurance. When a soldier executes an order a number of energy points is subtracted from his energy level and a proportional number of endurance points are subtracted from his endurance. Example: If a soldier had 50 endurance points and 100 energy points at the beginning of a turn and he used 50 energy points during that turn, he would lose 25 endurance points that turn. At the beginning of each game turn, all soldiers gain back a number of endurance points proportional to their strength and wounds.

6.7 Command Control

This number reflects the control a soldier has in understanding and completing orders given him. It has a value between 0.1 and 1.0. The squad leader's command control rating depends on his rank, the percentage of friendly soldiers he has line of sight to (see Section 10), and the percentage of enemy soldiers he can see. The remaining soldiers of the squad have command control ratings that are dependent on (in order of decreasing importance): distance from the squad leader, the soldier's power of observation, whether the squad leader has line of sight to the soldier, and whether the soldier has line of sight to his squad leader. A German soldier's command control rating will never exceed his squad leader's rating; this is not true for an American

soldier. A soldier's command control rating affects the amount of time it takes for him to complete an order. A soldier far away from his squad leader, for example, will have a lower command control rating and will execute fewer orders, than if the soldier were closer to his squad leader.

6.8 Explosives

The explosives section of the status report has the capacity to show the status of up to 6 explosive weapons. Each explosive being carried by the soldier has a two-letter identification code. The first letter specifies whether the explosive is a fragment grenade (F) or a plastic explosive (P). The second letter refers to whether the explosive is prepared (Y) or not prepared (N).

6.9 Other Weapons

The other weapons section of the status report has the capacity to show the status of up to 5 other fire or hand-to-hand weapons. (see section 8.7 for the weapon carrying limits for each type of weapon). Each other weapon has a three-letter identification code. The first letter specifies the weapon type:

I.D. Code Weapon

A	Automatic rifle/sub-machine gun
B	Bayonet
G	Garotte
K	Knife
M	Machine gun
R	Rifle

The second letter specifies whether the weapon is prepared (Y) or not prepared (N). The third letter specifies whether the weapon is loaded (Y) or unloaded (N). If the weapon is a bayonet, garotte, or knife it will not be given a third letter.

6.10 Current Orders

This is a list of the current orders given to a soldier. If a soldier had insufficient time to execute an order during the last computer resolution phase, the time required to complete the first order on the list will also be given.

6.11 Enemy Soldiers Sighted

If a 'blind' game is in progress (see section 2.4), the player also learns the location of any enemy soldiers his friendly soldier currently sees. For example, suppose a view of the mapboard reveals an enemy soldier in square 4337. Furthermore, suppose six of your friendly soldiers have the potential to see this enemy soldier (see section 10). You may find it advantageous to know which of your soldiers see this enemy, or perhaps more importantly, which (if any) of your soldiers do not currently see the enemy.

7.0 GET AND DROP ORDERS

Soldiers have the ability to drop and/or get (i.e., pick up) weapons. Time and energy costs required to drop and get weapons are shown on the order summary chart. There are limits on the number of weapons each soldier may carry (see section 8.7). Although the computer keeps a record of where all dropped weapons are located, it does not divulge this information to the player(s). Thus, it is the player's responsibility to remember where he had a soldier drop a weapon, if he later intends to have a soldier retrieve it.

7.1 Weapons on the person of a soldier who is dead or in shock are considered to be dropped weapons. Dropped weapons may be picked up and used by soldiers from either side. All 'Get Weapon' orders which cannot be executed because the weapon is not present in the square, require 10 timepoints and 1 unit of energy – the cost of 'searching' for the weapon. (If a 'Get' order cannot be executed due to the weapon carrying limit, the order is simply ignored.)

7.2 Each soldier is issued one fire weapon (*i.e., rifle, autorifle, or machine gun*) at the start of the game. A soldier who drops his fire weapon will gain 1 point in dexterity (up to a maximum of 10 points), allowing him to execute orders more rapidly. If the soldier subsequently retrieves the dropped fire weapon, his dexterity will decrease to the original level. Furthermore, a soldier's dexterity will decrease by one point for each additional fire weapon he acquires in excess of the one he normally carries. *Exception: If the additional fire weapon is a machine gun, the dexterity decreases by two points.*

7.3 All weapons that are retrieved with a Get command will be in the unprepared/unloaded state after it is retrieved. The Get command does not affect the status of the currently prepared weapon. The Drop command will affect the currently prepared weapon only if the dropped weapon is the prepared weapon. An explosive weapon primed to explode is not considered a dropped weapon. *Example 1: A soldier carrying a prepared rifle as his only fire weapon executes a DR (drop rifle). He will place his rifle on the ground and will not have a prepared weapon. Example 2: A soldier carrying 4 hand grenades, one of which is prepared, executes a DF (drop fragment grenade). He will place an unprepared hand grenade on the ground. His prepared weapon will still be a fragment grenade.*

8.0 MOVING YOUR SOLDIERS

All movement orders use the format **Mxdnm**.

M – Indicates movement order

x – Represents whether the movement is regular (R) or irregular (I)

d – Direction of movement (0-8)

n – Distance to be moved (in # of squares 0-9)

m – Mode of movement (*i.e., walk, run, crawl, etc.*)

When a soldier moves he uses time and energy points as shown on the order summary chart. The effects of terrain (doors, windows, etc.) on movement are shown on the terrain effects chart.

8.1 Regular or Irregular Movement

Regular movement is represented by an "R" and means that the soldier is facing in the direction of movement. An "I" indicates that the soldier remains facing in his original direction of facing while moving in direction "d". Energy and time costs for irregular movement are twice that for regular movement.

8.2 Direction

A man may move in any of 8 directions as shown in section 6.3. For diagonal movement, time and energy costs are multiplied by the square root of 2. Thus, the soldier pays appropriately for all the ground he covers.

8.3 Distance

Enter the number of squares you want the man to move.

8.4 Mode of Movement

There are 7 different movement modes available. Each requires different time and energy costs (*see the squad card*). Of the 7 modes, 5 allow movement from one square to another. The other 2 modes change a soldier's posture between prone and standing. The chart below lists the different modes which may be used:

R – Run

W – Walk

D – Dodge

C – Crawl

L – Look

F – Fall

S – Stand

A soldier must be upright in order to run, walk, or dodge. A soldier must be prone in order to crawl. The 'look' mode is a special case, since a soldier can 'look' while moving or while standing still. If a soldier is moving (*i.e., the distance (n) is not 0*) in the look mode, he must be upright. Otherwise, a soldier can 'look' in either posture. When falling prone or standing upright, the distance (n) must be 0 while any direction may be chosen.

8.5 Scanning

To scan, enter a 0 in both direction and distance positions of the movement order. While a soldier can scan in either an upright or prone position, it will take him longer to execute when prone (*see section 8.7*). A facing of 0 indicates that the soldier is looking in all directions. The soldier will have a 50% of normal chance of sighting the enemy, but unlike soldiers with a facing of 1-8 he will be able to look all around him. The movement mode entered at this time is irrelevant unless you specify 'L'. In this case a soldier will 'look' as well as scan (*see section 8.7*).

8.6 Changing Facing

If you wish to change the facing of a soldier without having him move out of his square, give a Move Regular order for 0 squares in the direction you wish the soldier to face. While a soldier may change face in either an upright or prone position, it will take him longer to execute when prone (*see section 8.7*). The mode of movement entered at this time is irrelevant unless you specify 'L'. Then a soldier will 'look' as well as change facing (*see section 8.7*). A soldier may be given a order which includes an implied order to change face. For example, a soldier facing direction '6' is given a 'MR34R' order. A soldier given this order will be charged the time and energy costs required to execute the implied facing change, as well as the movement costs between squares. The facing costs are also charged under the appropriate circumstances for the FSxxx order (*section 12.2*) and the EFxxx order (*section 12.6*).

8.7 The Look Mode

A soldier who is in the look mode will search for weapons lying on the ground and/or carried by another soldier (friendly or enemy) who is dead or in shock. A soldier can 'look' while 1) moving in an upright position between squares, 2) scanning, and 3) changing facing. The time and energy costs required to execute a scan or change of facing order when upright or prone and/or looking or not looking is shown below:

Scan / Changing Facing Costs

Upright (U) or Prone (P)	Looking Mode (Yes / No)	Time Cost	Energy Cost
U	No	10	1
U	Yes	15	1
P	No	15	2
P	Yes	20	2

If a soldier is in the look mode, and he spots a weapon, he will pick it up. The time and energy costs required to pick up weapons are the same as for the 'Get' commands. The rules that apply to the Get commands also apply to the look mode when a soldier spots a weapon. A soldier will pick up as many weapons as he sees in the square until the weapons carrying limit has been reached. The limit imposed on the number of weapons one soldier can carry depends on the weapon. The carrying limits for each weapon class (*i.e., explosive/non-explosive*) and kind are listed below:

Limit on Number of Weapons that One Soldier May Carry

Explosive Weapons (No more than 6 total)

Weapon	Limit
Plastic Explosive	2
Hand Grenade	6

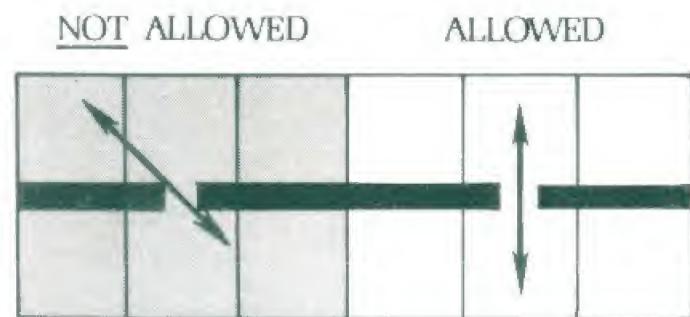
Non-Explosive Weapons (No more than 5 total; No more than 3 fire weapons)

Weapon	Limit
Machine Gun	2
Autorifle	3
Rifle	3
Garotte	2
Knife	3

If a soldier spots more than one weapon of the same class in the same square, he will pick them up in the order of their priority. The table shown above lists the weapons in order of decreasing priority. *Example: A soldier carrying 3 explosive and 3 non-explosive weapons (only one fire weapon) is in the look mode. He spots a dead soldier who is carrying a plastic explosive, 4 hand grenades, an autorifle, a garotte, and a knife. The soldier will pick up the plastic explosive, 2 grenades, the autorifle and the garotte. He will pay the appropriate time and energy costs for each weapon he picks up. The soldier's dexterity will decrease by one point.*

8.8 Aperture Movement

A soldier may not move diagonally through a door or window. The soldier must first move directly adjacent to the aperture and only then may he move through it.

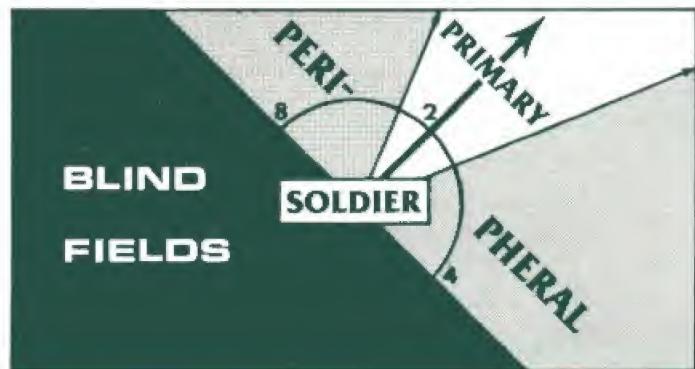


9.0 SNEAKING

If you wish to have a soldier move discreetly so as to have a lower probability of being seen, give the soldier a SB or sneaking begins order. Once a soldier is given a sneaking order, he will be considered to be sneaking until the SE or sneaking ends order is given. While sneaking, all time and energy costs for his actions will be doubled. Under certain conditions, sneaking soldiers are afforded protection from exploding fragment grenades not given to non-sneaking soldiers (*see section 12.6*). A sneaking soldier who fires a weapon reverts to normal (non-sneaking) status.

10.0 SIGHTING THE ENEMY

In order to sight an enemy soldier, the enemy must be in one of your soldier's field of vision. If a soldier has a facing of 1-8, his field of vision is the angle of 180 degrees centered on his facing direction. The center 45 degrees is considered to be the primary field of vision. The remaining 135 degrees is considered the peripheral field of vision.



The above diagram shows the field of vision of a soldier with a facing of 2. A soldier that is scanning has a primary field of vision of 360 degrees, i.e., he can see in all directions. A soldier in hand-to-hand combat can only see the enemy soldiers in his square (he is too busy fighting to enjoy the view.)

10.1 Chance of Spotting

An enemy soldier in a friendly soldier's field of vision is not necessarily spotted. The following formula is used to determine whether the enemy man is spotted:

$$P_c = F \times P_o \times T \times S \times P_S$$

Pc – Percentage chance to spot the enemy

F – Facing multiplier (section 10.2)

Po – Power of observation multiplier (section 10.3)

T – Terrain multiplier (section 10.4)

S – Sneaking multiplier (section 10.6)

PS – Primary/peripheral multiplier (section 10.7)

This probability of spotting is also used in determining the probability of hitting a target being fired upon (section 12.9).

10.2 Facing Multiplier

The facing multiplier is determined by the facing of the friendly soldier:

Facing	Multiplier
1-8	1.0
0	0.5
9	0.0

10.3 Power of Observation Multiplier

The power of observation multiplier is determined by the following formula:

$$0.5 + (\text{Power of observation of friendly soldier} \times 0.05)$$

10.4 Terrain Multiplier

The terrain multiplier is determined by the following formula:

$$T_m = (1.0 - D \times .01) \times T_1 \times T_2 \times T_3 \dots \times T_n$$

Tm – Terrain multiplier

D – Distance

T1, T2, T3, Tn – Terrain Type multipliers

Terrain	Multiplier
Wall	0.00
Statue	0.00
Window	0.25
Door	0.50
Hedge	0.50
Rubble	0.60
Interior	0.80
Clear	1.00

A few examples will illustrate the terrain multiplier. *Example 1: A soldier is standing at 3117 looking at a soldier in 3135. The terrain multiplier is $(1.0 - 18 \times .01) \times 1.0 = 0.82$. Example 2: A soldier standing at 1215 looks at a soldier at 1715. Terrain*

multiplier is $(1.0 - 5 \times .01) \times 0.5 \times 0.6 = 0.285$. Example 3: A soldier standing standing at 1220 looks at a soldier in 2120. The terrain multiplier is: $(1.0 - 9 \times .01) \times 0.5 \times 0.8 \times 0.8 \times 0.8 \times 0.8 \times 0.8 \times 0.5 = 0.0745472$. Example 4: A soldier standing at 1126 looks at a soldier at 1429. The terrain multiplier is $(1.0 - 4.2426407 \times .01) \times 0.5 = 0.478768$. NOTE! The computer will display the terrain multiplier in any level 1 solitaire game when given an FSxxxxL order. Also, if the terrain multiplier (TM) is below .01, it is considered to be zero.

10.5 A soldier looking directly through an obstruction (i.e., adjacent to a window, doorway, or hedge) does not count the adjacent obstruction for visibility purposes. Example 1: A soldier at 1320 looks at a soldier at 2220. The terrain multiplier is: $(1.0 - 9 \times .01) \times 0.8 \times 0.8 \times 0.8 \times 0.8 \times 0.5 = 0.1490944$ (compare with Example 3 in section 10.4). Example 2: A soldier at 3318 looks at a soldier in 2918. The terrain multiplier is $(1.0 - 4 \times .01) = 0.96$

10.6 Sneaking Multiplier

The sneaking multiplier is determined by the sneaking mode of the enemy soldier.

Mode	Multiplier
Sneaking	0.5
Not sneaking	1.0

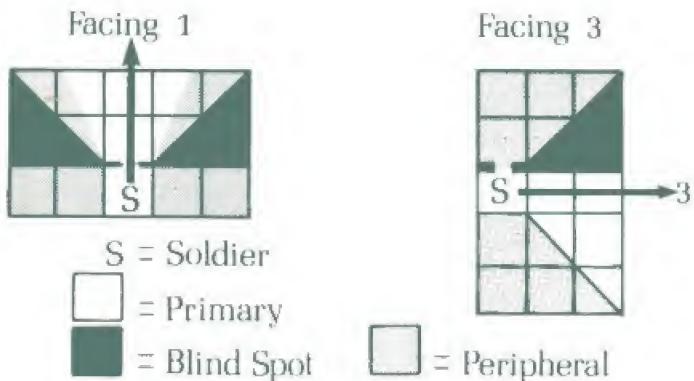
10.7 Primary/peripheral multiplier

Field of Vision	Multiplier
Enemy is in primary field	1.00
Enemy is in peripheral field	0.75

10.8 Enemy soldiers may only be spotted if they are in the field of vision of a friendly soldier. All enemy soldiers in a friendly field of vision and for whom the percentage chance to spot the enemy is greater than 0.01, are automatically spotted at the instant of their firing a fire weapon.

10.9 If two soldiers are both prone, and there is a window or a hedge between them, then they cannot spot each other, unless they are in adjacent squares.

10.10 A soldier looking out from a window or a door is allowed only a 90 degree field of vision out of the aperture as shown in the accompanying diagram. A square that is $\frac{1}{2}$ blind spot and $\frac{1}{2}$ in the field of vision is considered to be in the soldier's blind spot. Example: A soldier standing at 3424 with a facing of 7 would not have line of sight to square 2533, but he could spot an enemy soldier in 2532.



10.11 Enemy soldiers are spotted if they are in a square containing a friendly soldier.

11.0 WEAPONS

There are three types of weapons used in Computer Ambush: fire weapons (rifles, automatic rifles/submachine guns, and machine guns), explosives (plastic explosives and fragment grenades), and hand-to-hand weapons (knives, bayonets, and garrotes).

11.1 Standard Weapon Allocation

Below is a table showing the standard weapon allocation for the German and American squads.

American Squad			
Soldier	Fire Weapon	Hand Grenades	Plastic Explosive Garrote
Padooka	Autorifle	2	
Richfield	Rifle	1	
Bastinelli	Autorifle	2	
Lawson	Rifle	2	
Garrity	Machine Gun	2	
Cheng	Rifle	5	Yes
Wheelock	Rifle	1	
Hoss	Rifle	2	
Marootian	Autorifle	4	Yes
Dumke	Rifle	2	

German Squad			
Soldier	Fire Weapon	Hand Grenades	Plastic Explosive Garrote
Reich	Autorifle	3	
Kleindorf	Autorifle	2	
Allbrecht	Rifle	2	
Gruber	Machine Gun	1	
Zimmer	Autorifle	2	Yes
Schneider	Rifle	1	
Braun	Autorifle	2	
Wagner	Rifle	5	Yes
Muller	Rifle	2	
Dusel	Rifle	2	

11.2 Non-Standard Weapon Allocation

During the Computer Ambush Scenario Selection Phase, a player has the option of allocating weapons to his squad of soldiers. If you choose this option, you must then decide if you will receive a 'restricted' allocation or a more 'unlimited' allocation. The 'restricted' allocation will limit the numbers and types of weapons allocated to your squad, dependent upon the size of the squad (for example, with a 'restricted' allocation, a squad will never receive more than one machine gun). With an unlimited allocation, however, each squad (regardless of size) will receive a number of each type of fire weapon equal to the number of soldiers in the squad, 30 fragment grenades, and a plastic explosive. Note especially that the 'unlimited' allocation allows a squad that lacks a demolitions expert, to receive a plastic explosive. Such is not the case with the 'restricted' allocation (see also sections 4.11 and 12.7). Irregardless of whether a 'restricted' or an 'unlimited' allocation is chosen, each squad will receive one garrote and each soldier will receive one knife. The computer will give the player a list of the number and types of weapons his squad has been allocated. The player then apportions these weapons to his soldiers as he desires, subject only to the following restrictions: 1) each soldier will carry one and only one fire weapon and 2) each soldier can carry a maximum of 6 explosive weapons. A player can obtain a printout of the non-standard weapon allocation if he desires.

12.0 WEAPONS AND COMBAT

Most of the orders you can give to your soldiers concern manipulating weapons in preparation for or during combat. These orders are explained below.

12.1 Weapons Preparation

All weapons must be prepared before they may be used. Each soldier may only have one weapon prepared at a time (*exception: a rifle and bayonet may both be prepared*). When an order is given to prepare a weapon, any other weapon that had been prepared will automatically be unprepared. *Example: A soldier carrying a rifle in his hands decides to throw a grenade. By giving an order to prepare a grenade he slings his rifle and then pulls out a grenade. The rifle is now unprepared and the grenade is prepared. The prepare weapon order follows the form "Pw" where w is the initial of the weapon being prepared.* *Example: A PF order will prepare a fragment grenade. See the order summary chart for time and energy costs.*

12.2 Use of Fire Weapons / Fire a Single Burst

There are two different orders which will result in the firing of a fire weapon. The first order is fire on an enemy in a particular square, and it takes the form FSxxx where:

- F – signifies that this is a fire order
- S – signifies that this is a single burst fire order
- xx – indicates the x coordinate (column) in which the enemy is located
- yy – indicates the y coordinate (row) in which the enemy is located

FS stands for fire a single burst. Since the enemy must be in the designated square for your man to fire on him this order is most useful on stationary targets. If an enemy soldier is present in the target square when the FS order is given, your soldier will fire at the enemy soldier even if he moves out of the target square (unless the enemy soldier moves completely out of the line of sight of the firing soldier before the soldier actually pulls the trigger). A soldier who must change facing to execute the FSxxx order will be charged the appropriate additional time and energy costs for changing facing (section 8.6). The soldier will remain facing in the direction of fire after execution of the fire order.

12.3 Use of Fire Weapons / Fire on Area

The second type of fire order has the form FAppt where:

- F – signifies that this is a fire order
- A – signifies that this is an area fire order
- pp – this is the minimum percentage-chance-to-hit-the-enemy that must be obtained before the soldier will fire. (99 equals don't shoot until you see the white of their eyes).
- tt – this is the amount of time in time points that you want your soldier to wait while looking for a target to shoot. The number of time points must be between 10 and 99.

FA stands for fire on area. A soldier given this command will fire on the first target that he can see for which he can obtain a shot that has at least a "pp" chance of hitting. He will continue to fire on targets that he can see until "tt" time has elapsed.

Example: A soldier is in square 3253 facing direction 1. This soldier is given the order FA0599. After 30 time points have elapsed an enemy moves from 3157 to 3257. At this point he is seen and fired at by the soldier in 3253 (assuming that the chance to hit is over 5%). This soldier cannot fire again until sufficient time points have elapsed to account for his having fired (an average rifleman would have to wait 25 more time points before firing again). Since the soldier had been ordered to FA for 99 time points he would continue to look for targets (possibly the same one) until 99 time points have elapsed.

12.4 Targets for FS and FA Orders/'Ducking' Rule

Soldiers given FS or FA orders will not fire at enemy soldiers who are in shock or dead. Under certain conditions, soldiers who are being fired upon may 'duck'. In order for a soldier to 'duck', three concurrent conditions must be met: 1) the soldier is being fired upon; 2) the soldier, himself, is currently firing a weapon (either FS or FA); and 3) he is looking through an obstruction (that is, adjacent to a window, doorway, or ledge). When such a soldier 'ducks', he merely takes more time to execute his fire order. Note, however, that even if the three conditions listed above are met, the soldier will not automatically 'duck'. The chance of such a soldier 'ducking' is proportional to his command control: soldiers with a high command control have a lower probability of 'ducking'. If a soldier 'ducks', he will take from 4 to 30 additional timepoints (0.4 to 3 seconds) to fire his fire weapon (this is determined randomly). A 'ducking' soldier consumes no energy during the time he is 'ducking'. *Extended example: The American squad is attempting to gain control of the government building, strongly suspected to be guarded by German soldiers. At this time, neither side has spotted an enemy soldier. Currently, Padooka and Bastinelli are both prone, facing 1, looking through the hedge in square 2945. Richfield is prone, facing 1, looking through the hedge in square 3145. Gruber is prone, facing 5, looking through the window in square 3150. Bastinelli is going to attempt to strengthen the American position by dodging to square 3746 and falling prone behind the hedges, facing 8. Padooka and Richfield will provide 'cover' for Bastinelli. Thus, Padooka and Richfield are both given 'MR10S (CR) FA0199' orders, while Bastinelli is given 'MR20S (CR) MR21D (CR) MR 37D (CR) MR80F' orders. Gruber is protecting the south flank of the government building and is given 'FA0199' orders. Just as in real life, what will actually happen is largely unpredictable. Gruber will almost certainly spot Bastinelli by the time he dodges to square 3046 (chance of spotting is more than 85%), and will start shooting at him. (Of course, he may spot Padooka or Richfield when they stand up and start shooting at them first, even though the chance of spotting them is less than 50%. Gruber's chance of hitting a dodging Bastinelli is roughly 22% (see section 12.9), giving Bastinelli a reasonable chance to survive a few gun bursts. As soon as Padooka and Richfield are standing and Gruber starts shooting, they will spot Gruber automatically and will begin shooting at Gruber. (Notice that if they did not stand, they could not see Gruber, who is prone behind a window, at all – see section 10.9). Even though their chance of hitting Gruber is very poor (less than 10%), they may well force Gruber to 'duck'. If Gruber does 'duck', Bastinelli may have enough time to reach square 3546, where he is out of Gruber's line of sight. However, if Gruber does not 'duck' due to a high command control rating and/or luck, he will fire his machine gun enough times to virtually ensure wounding Bastinelli. Of course, Padooka or Richfield might get very lucky and wound or kill Gruber. The number of possibilities of even this simple fire fight are large. Also, don't forget the possibility that fire weapons might unload (see next section). Throw in a hand grenade or two (no pun intended) and . . . well, you get the idea. Whatever happens, the chances are good that they won't occur exactly that way again.*

12.5 Loading Fire Weapons

All fire weapons run out of ammunition 10% of the times after they are fired. *Exception: Machine guns only unload 3% of the times fired.* An unloaded weapon may not be fired. To load a weapon you must give the soldier a load weapon order. This order takes the form Lw where w is the weapon being loaded. A player may want to give a soldier who has just fired a weapon, a Load order in case the weapon unloads. If a load order is given, and the weapon is already loaded, 10 time points and 1 unit of energy is charged. (If the load weapon order is impossible to execute because the soldier doesn't have the weapon, the order is ignored.)

12.6 Use of Explosives / Grenades

There are two types of explosives: fragment grenades and plastic explosives. In order to throw a grenade, a soldier must first have line of sight to the target square and sufficient energy to throw it the required distance (see *Squad Card*). (The average unwounded soldier with an endurance of 99 has enough energy to throw a grenade approximately 60 meters. If a soldier does not have sufficient energy to throw the grenade to the target square, the order is ignored.) Whether or not a thrown hand grenade lands in the target square is dependent upon the throwing ability of the soldier who threw it. The throwing ability will determine the accuracy of both the aim as well as the range of a thrown hand grenade. To give you an idea of throwing accuracy, an average soldier will throw a grenade with an accuracy in aim of $\pm 25\%$ of the distance to the left or right of target center and with an accuracy in range of $\pm 10\%$ of the distance. The path that the hand grenade takes to its destination is the 'line of flight' determined by the computer. (This means it will stop if it hits a wall or the statue.) A soldier will always face the direction he is throwing; if he must change facing to execute the EF order, he will pay the appropriate change facing costs (section 8.6). Hand grenades take time points while they are in the air. The travel time of the grenade is equal to 4x the distance of the throw as measured in squares. The grenade will explode 4 time points after it has reached its destination. All soldiers in the blast square are killed by the explosion. A grenade may wound soldiers up to 12 meters (4 straight squares) away from the blast square. The further away the soldier is from the explosion the less likely he will be hurt by the explosion. If there are terrain features (doors, hedges, etc.) between the grenade and a soldier, or if the soldier is prone, then the soldier is less likely to be wounded. A soldier who has a door or window between him and an exploding grenade, and is both adjacent to the window or door and in the sneaking mode, is protected from injury. Example: A soldier standing in square 2852 throws a grenade through the door and into square 2752. If this soldier is not sneaking when the grenade explodes, he could be severely wounded whether or not he is prone. However, if this soldier were in the sneaking mode when the grenade exploded, he would not be injured.

12.7 Use of Explosives / Plastic Explosives

Plastic explosives may not be thrown. Plastic explosives are used by setting a fuse length in time points and then placing the explosives in the square in which the explosives expert set the fuse. This means that you should set a long enough fuse so that the explosives expert can run clear of the blast area. Note: If your demolitions expert is in shock or killed, your squad leader may attempt to detonate the plastic explosives, if you consider it mission essential. However, be forewarned that he may set the fuse incorrectly so that the plastics do not explode or they explode sooner or later than anticipated. Equally likely is the possibility that they blow up in his face. When plastic explosives detonate, the square in which the explosion occurred and all adjacent squares are immediately turned into rubble squares and all standing structures are blown down. All soldiers in those squares are killed and all weapons (whether carried by soldiers or lying on the ground) are destroyed. Soldiers up to 24 meters (8 straight squares) away from the blast square may be wounded or killed by the blast. As with grenades, the further a soldier is from the blast square as well as the more obstacles between the blast and the soldier, the less likely the soldier will be hurt by the explosion. Sneaking soldiers are given the same protection from plastic explosives as from grenades (see section 12.6). However, remember that if a soldier is too close to the blast, the door or window giving him protection will be blown down, and thus, will not give him protection.

12.8 Hand-to-Hand Combat

A soldier given a hand-to-hand order while in the same square as an enemy soldier will attack that soldier if he has the required

20 units of energy. The soldier that comes under attack will defend himself if he has the required 10 units of energy. Both soldiers are then in 'hand-to-hand status'. The average soldier who is in hand-to-hand status will 'attack' once every 15 time points. Soldiers that are in hand-to-hand status, remain in that status for the duration of the turn (unless one soldier dies or goes into shock). The percentage chance to wound an enemy in hand-to-hand combat is proportional to the attacker's hand-to-hand ability, his wounds, the weapon he is carrying, whether he is jumping on an enemy, the defender's hand-to-hand ability, his wounds, and the weapon he is carrying. If a soldier is jumping on an enemy (HJ), then he is twice as likely to wound the enemy. Weapon effectiveness in hand-to-hand combat (both as offensive and as defensive weapons) rated from best to worst is: bayonet, knife, rifle, automatic rifle/submachine gun, machine gun, garotte or hand grenade or plastic explosive or unarmed. The garotte is a special weapon, for normally it is worthless; however, when jumping at an enemy it is the best weapon to use. So that you have an idea of the usefulness of hand-to-hand combat, an unwounded average soldier who is jumping with a bayonet against an unwounded average enemy who is carrying a bayonet has a 50% chance to wound the enemy. A soldier who executes and survives an HH order, will be facing the direction he was before he went into hand-to-hand combat. A soldier who executes and survives an HJ/HJ order will be in the scan mode. A soldier who successfully defends himself from a charging enemy will continue executing the orders given him. Note: a soldier who has been given an HJ/HJ order cannot be given a subsequent order to move to another square in the same turn.

12.9 Weapons Accuracy

When a soldier is fired upon, the chance of wounding him is proportional to the firing soldier's marksmanship, the accuracy of the weapon being fired, the probability of the target being seen by the firing soldier, the posture of the target soldier (prone men are 50% less likely to be hit), the orders of the target soldier (moving soldiers are 25% less likely to be hit, dodging soldiers are 50% less likely to be hit), and the orders of the firing soldier (a soldier with a FA order is 25% less likely to hit the target than a soldier with a FS order). The basic accuracy of the fire weapons are as follows:

Weapon	Accuracy
Rifle	100%
Machine gun	75%
Automatic rifle/ submachine gun	75%

Example: An average soldier with an FS order firing a rifle at a soldier running in clear terrain ten squares away would have roughly a 34% chance of hitting the target. If that soldier was dodging, the probability would be roughly 17%.

12.10 Except for the special cases of soldiers present in the blast square of a fragment grenade or in a square adjacent to a plastic explosive detonation, when a soldier is hit by either a fire weapon, an explosive, or by hand-to-hand combat, the number of wound points allotted to the soldier is between 1 and 99 and is determined randomly. If a soldier is 'hit' and his wound point total is greater than 10 he will fall prone and fail to carry out any further orders during that turn. If a soldier is 'hit', he will 'scream' 50% of the time. Exception: a soldier who is 'hit' as a result of hand-to-hand combat will always 'scream'.

13.0 NON-STANDARD SOLDIER CHARACTERISTICS

A player may choose to have the computer randomly generate a set of soldier characteristics rather than accept the standard set of soldier characteristics given on the squad card. (Note: the rank and weight of the soldiers remain the same.) A challenging two-player game can be developed in this manner if both

players agree to take a computer-generated squad into battle. This will add a great deal of realism to the game: just as in real life, you must use the men you get and make the most out of them.

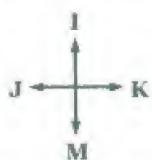
13.1 Changing your soldiers' characteristics

After the computer has generated a random set of characteristics for each soldier of your squad, it will display the soldiers' names and their new characteristics. The cursor will be over the "strength" characteristics of the squad leader. If you are willing to accept both the characteristics and the names of the soldiers, enter the letter 'F' for finished. If you are willing to accept the characteristics of the squad as is, but wish to change the soldiers' names, enter the letter 'N' (see section 13.2). If you wish to change a soldier's characteristic, enter a number between 0 and 9 (0 equals '10'). The cursor will automatically advance to the next characteristic. You may selectively change your soldiers' characteristics by moving the cursor over the characteristic you wish to change.

13.1.1 Apple Version

You can move the cursor by pressing the following keys: I, J, K, M, left arrow (\leftarrow), or right arrow (\rightarrow). A list of the keys the computer will accept and their function is given below:

I — moves the cursor up
J — moves the cursor left
K — moves the cursor right
M — moves the cursor down
 \leftarrow — moves the cursor left
 \rightarrow — moves the cursor right



RETURN — moves cursor to first characteristic of next soldier
The numbers 0 through 9 — changes characteristic
N — enters the 'Change Name' mode (see section 13.2)
F — moves the cursor to the 'Finish' field

13.1.2 Atari Version

You can move the cursor by pressing the "arrow" keys (ordinarily, you must simultaneously press both the "control" key and an "arrow" key to make the cursor move. In COMPUTER AMBUSH, however, pressing the control key, while acceptable, is not required). A list of the keys the computer will accept and their function is given below:

\uparrow — moves the cursor up
 \downarrow — moves the cursor down
 \rightarrow — moves the cursor right
 \leftarrow — moves the cursor left

RETURN — moves cursor to first characteristic of next soldier
The numbers 0 through 9 — changes characteristic
N — enters the 'Change Name' mode (see section 13.2)
F — moves the cursor to 'Finish' field

13.2 Changing your soldiers' names

If you wish to change the names of your soldiers, enter the letter 'N'. The cursor will then be placed over the first soldier's name. You may then enter new names for your squad. (A 'Return' moves the cursor to the next soldier's name.) The first letter of each soldier's name must be different. When you have entered new names, the computer will go back to the 'Change Characteristics' mode. Enter the letter 'F' to enter the 'Finish' field. The computer will then ask if you are finished changing the names and characteristics of your squad. If you are finished, type 'Y'; on any other input the computer will enter the 'Change Characteristics' mode.

13.2.1 Apple Version

When you type in new names, the first letter of the name must always be uppercase, and all subsequent letters must be lowercase. Imbedded blanks are allowed, in which case the first letter after the blank must be uppercase (e.g., Joe Buck).

13.2.2 Atari Version

When you type in new names, the computer will ensure that the first letter of the name is uppercase. Subsequent letters can be lowercase if you press the "LOWR" key. Imbedded blanks are allowed, so that you may type a name like Joe Buck if you desire.

13.3 Saving/Printing Your New Squad

You are given the opportunity of saving and/or obtaining a printed copy of your generated squad. If you wish to SAVE your squad, you must have previously initialized a SAVE disk (see section 14). You will be asked to give a name for your squad. The name must be different from any other squad name you have already saved.

14.0 COMPUTER AMBUSH DISK MANAGEMENT

There are four disk commands COMPUTER AMBUSH can perform. These commands allow you to INIT a SAVE disk, CATALOG a SAVE disk, DELETE a squad, and DELETE a game. You must INIT a SAVE disk before you can perform any other function. A 'CATALOG' of a SAVE disk will list the names of all SAVED games and squads. (Note: The Apple computer appends a suffix to the name you give when saving a squad or game on disk. Whenever the computer later asks you for the name of your squad or game, do not include the suffix in the name.) One SAVE disk can hold about 30 squads and 15 games. The 'DELETE' command will remove a squad or game from the disk. If you choose the 'perform disk management' option, the computer will give explicit directions for executing the disk management functions.

15.0 ORIGINAL DESIGNER'S NOTES (or, You Should Have Seen The One That Got Away)

I've been wargaming since I was twelve and game designing since I was ten. I couldn't believe it when I was offered an opportunity to get paid for what I've wanted to do. Having played all the tactical man-to-man games that I could find, I figured it was time for the definitive game on the subject. Definitive because all the drudgery would be dealt with by the computer! All the players would have to do is have fun. In the last six months I've learned (the hard way) the limitations of small computers and my own limitations in simulations. I think the game you have in your hands is a very good one, certainly worth playing often, and it should be a lot of fun. But honestly, folks, as soon as we all get a home Cray II computer . . . My original game had 30 different weapons, the map was 100 \times 100 squares, there were prisoners, guards, medics, communications, campaign games, etc.

— Ed Williger

16.0 SCENARIOS

COMPUTER AMBUSH is actually 12 games in one, for there are five solitaire scenarios and seven two-player scenarios. At the beginning of each game the player(s) will be asked whether a two-player or solitaire game is to be played.

A. SOLITAIRE SCENARIOS

If you choose to play a solitaire game, you will be asked to choose the skill level of play. That is, you will choose to play against a squad from one of the following German divisions: 1) Volksgrenadiers (rookies), 2) Wehrmacht (average), or 3) Waffen SS (very good). (Note: If you choose the NCO Training Scenario, you will automatically play against the German rookies.)

1. NCO Training

This scenario serves as the introductory game for new players. The American player is given four soldiers placed on column 13 south of row 21. His mission is to secure the village, i.e.

eliminate all German soldiers encountered. The American player wins if all German soldiers are in shock or dead, otherwise the computer wins. The computer will notify the player when he has either won or lost. The following are possible orders for the American soldiers on the first turn:

- To have Padooka cover the street above the factory, enter: MR12R(CR) MR21R(CR) MR30F(CR) SB(CR) FA0199(CR) NO(CR). Padooka will run around the building, fall prone in the street, and shoot if he sees a German.
- To have Cheng run around the corner of the building and then dodge down the street, enter: MR15R(CR) SB(CR) MR21D(CR) MR30R(CR) FA5030(CR) NO(CR). Cheng will run up to the street, sneak, dodge diagonally 1 square, face down the street, and shoot if he sees a German soldier.
- To have Bastinelli throw a grenade into the factory, enter: MR11R(CR) PF(CR) EF1820(CR) MR58R(CR) MR32R(CR) PA(CR) FA2510(CR) NO(CR). Bastinelli will throw a grenade into the factory, run around the back of the building, unsling his autorifle, and shoot any German soldier he sees.
- To have Dumke run around the back of the building, enter: MR41R(CR) MR34R(CR) MR21R(CR) MR13R(CR) NO(CR). Dumke will run completely around the building, climb over a hedge, and run up the other side.

2. Ambush

In this scenario the American player must set up and execute an ambush of a 7-man German patrol. The American player has the option to use any or all of his 10 soldiers (we suggest 4-5) and they may be set up as desired by the player (the computer will ask the player which soldiers he wishes and where he wishes to start them). The German patrol will enter the map at one of eight locations. It will pass through the center of the town (near the statue) and then exit the map at one of the eight locations. The entrance and exit locations are randomly chosen, except that they will never be adjacent. The eight entry locations are:

2464; 3664; 4849; 4837; 3111; 1126; 1137; 1158

The American player wins if all German soldiers are in shock or dead. The American player loses if all of the American soldiers are in shock or dead or if all non-wounded German soldiers (must be minimum of three) are within 3 squares of the German target square. The computer will notify the player if he has won or lost.

3. Raid

In this scenario the American player is attempting to destroy the German communications center in the Government Building. The computer will set up six German soldiers in or near the Government Building. The American player may use any or all ten of his soldiers (we suggest 5-6). He should set up his soldiers west of column 20 or east of column 40, and south of row 44. It may appear that the Germans could be easily outmatched. However, the American player is under a time constraint: he must accomplish his mission within 8 minutes if playing a level 1 (easy) game and within 4 minutes if playing a level 2 or 3 game. (*Note: 8 minutes equates to 4800 timepoints, or at least 20 turns.*) The American player wins if all German soldiers are in shock or dead or if he detonates a plastic explosive in square 3052. The American player loses if all American soldiers are in shock or dead or if he runs out of time. The computer will notify the player if he has won or lost.

4. Infiltration

This scenario is basically the reverse of the Ambush solitaire scenario. That is, the American player must move a patrol through the town against 10 German soldiers. The American player will be asked to choose both a starting and an exit location from the list given in the solitaire Ambush Scenario above (the computer will verify that the locations are not adjacent). The

computer will then automatically place the American soldiers in a patrol formation near the starting location. The standard patrol formation is given here. The numbers in the squares refer to the relative rank of the soldier. Thus, the squad leader is '1', second in command is '2', etc. Soldier number '3' is in the starting square.

	1	
7		6
	2	
8	10	9
4		5
	3	

Center
of the
Mapboard

The American player may eliminate any of his soldiers that he desires (we suggest you keep 8-10). However, he will not be able to change their starting positions. The American player's mission is to move his patrol to his target location; he has a 10,000 timepoint limit to accomplish the mission. The American player wins if all German soldiers are in shock or dead or if all non-wounded American soldiers (must be a minimum of one-half of the soldiers he started with) are within 3 squares of the target location. The American player loses if all American soldiers are in shock or dead or the time limit is exceeded. If more than one-half of the American patrol is in shock or killed, the only way the American player can win is by killing all the German soldiers. The computer will notify the player if he has won or lost.

5. Barn Defense

In this scenario the American player is defending the barn (B1) against a 10-man German attack. The American player should set up his players in or near the barn (we suggest 10 soldiers). The German soldiers will start west of column 32 and north of row 27. The American player wins when all German soldiers are in shock or dead. The American player loses if all American soldiers are in shock or dead or if the Germans detonate a plastic explosive in square 4113. The computer will notify the player if he has won or lost.

B. TWO-PLAYER SCENARIOS*

1. Ambush

This scenario is basically the two-player version of the solitaire Ambush scenario: the American player is ambushing a German patrol. The German player will be asked to choose a starting and target location from the same list of locations given in the solitaire Ambush scenario (the computer will not divulge this information to the American player, but will inform the German player of his squad's objective point whenever he asks for his squad's characteristics). Both the American and German players may use as many soldiers as they desire. The German soldiers will be placed on the map in the standard patrol formation (see the solitaire Infiltration scenario). The American player's mission is to look for the German patrol and destroy all German soldiers before the patrol reaches the target location. The German player's mission is to move his patrol to the target square within 10,000 timepoints. The American player wins if all German soldiers are in shock or dead or if the German patrol fails to reach its destination in 10,000 timepoints. The German player wins if all American soldiers are in shock or dead or if all non-shocked German soldiers are within 3 squares of the target square, and the number of non-shocked soldiers is at least one-half of the starting patrol. The computer will notify the players if a player has won the game.

2. Patrol

This scenario is similar to the two-player Ambush Scenario above, except that the players reverse roles. That is, the German player is ambushing an American patrol. Otherwise, the playing rules and winning conditions are the same as the Ambush Scenario.

* The defender should be given roughly $\frac{2}{3}$ of the number of soldiers given to the attacker.

3. Strongpoint

In Strongpoint, the American player is defending the factory (A1) against a German assault. The American player should set up his soldiers south of row 25 and west of column 30. The German player should place his soldiers north of row 25 and east of column 30. The American player's mission is to survive the German onslaught and preserve the factory from destruction (detonation of a plastic explosive within the main shop will destroy it) for 12 minutes (7200 timepoints). The German player's mission is to either destroy all American soldiers or detonate a plastic explosive within the factory within the 12 minute time limit. The computer will notify the players if a player has won the game.

4. Church Defense

In this scenario the Germans are on defense protecting the church (D5) from an American assault. The German player should set up his soldiers north of row 37, east of column 33, and south of row 50. The American player may set up anywhere outside of that perimeter. The German player's mission is to preserve the church from destruction for 12 minutes (7200 timepoints). The American player has 12 minutes to either kill all Germans or destroy the church with a plastic explosive. The computer will notify the players if a player has won.

5. Seek and Destroy

This scenario represents a meeting of two enemy patrols. Chance meetings of patrols were rare, but they could become quite violent. The German player should place his soldiers anywhere north of row 40, while the American player should put his soldiers south of row 35. The American player wins if he gets a soldier back to row 11 after he has passed through square 4055 (the soldier must end his turn in that square). The German player wins if he gets a soldier back to row 64 after he has passed through square 4013. Also, if all enemy soldiers are in shock or dead, then the remaining player wins. The computer will notify the players if a player wins.

6. Alley Fight

In this scenario each player is attempting to gain control of an area of the map within a specified period of time. The perimeter of the area is row 55, row 27, column 24, column 11.

The players are attempting to 'control' all the squares within the perimeter. The computer will ask which player will start the game defending the area. The player which defends the area, starts the game with control of all squares within the perimeter. The other player attempts to wrest control from the controlling player. A player has control of a square if one of his soldiers was the last one to enter it. We suggest that the player who begins the game in complete control of the area, keep only $\frac{1}{4}$ of the soldiers that the attacking player keeps. The winner of the game is the player who has control of most squares at the end of the game. The length of the game is determined by the following equation:

Number of timepoints = number of defenders/number of attackers × 5000

7. Free Form

Make up your own scenarios. From one-on-one duels to 10-on-10 campaign games, you can begin with as many soldiers as you wish and at any place on the map that is mutually agreeable to the players. Try a game of one-on-one where both players agree not to use their fire weapons (*i.e., hand grenades and knives only*). For those of you who want to try simulated computer non-violence, try relay races (it's not as easy as it sounds). Remember, the fewer the soldiers you choose the faster the game.

NOTE: If all the remaining soldiers are in shock or are killed on the same turn, the American player is considered the loser and the German player the victor (i.e., for the American player to win he must have at least one remaining soldier that he can command).

CREDITS

U.S. ARMY SOLDIER DOSSIERS



SERGEANT J.C.
"BUCK" PADOOKA

is one of the few old "peacetime" non-coms. He is an "old vet" in every sense of the word. Enlisting in the early days of the Depression, he immediately "struck a home." Having grown up in the mining country of Pennsylvania, one of seven children, he had looked forward

only to a lifetime of digging underground in the mines, with perhaps a few days a year hunting as his only relief. But since, with the coming of the Depression, there were no jobs in the mines anyway, he chose the army as the only way out. Peacetime army life was a far better life than the one he had been used to — and he could spend most of his time out in the open, training for another kind of "hunting." He quickly learned the rules of the game, adapting to them easily, and advanced to non-com status as soon as one of the old-

timers had been busted for an AWOL drinking bout. The difference between "Buck" Padooka and most of the other non-coms was that, while he drank and fought as much as any, he cared enough for his role of squad leader to know where to draw the line. He might make it back from a night carousing in town only two minutes before the first formation — but he would be there two minutes before, not two minutes late.

When the army began to build for the coming war, he could have gone to officers' school, but he turned down the offer. Being in charge of a small group of infantrymen was what he wanted; any rank above squad leader would have been too much "book work," too much "headquarters' chicken" for him. He is at his best when out in the open, directing men in a situation requiring all his knowledge and experience.

Without a family of his own, his main human relationships now center on the men under his charge. The thing that bothers him most about the war is not the hardship, the danger, or the discomfort, but only the need of losing men. While he keeps his distance from his men,

never playing the buddy-buddy game, he has become attached, despite himself, to those under his command. On their part, they sense that he will get them killed in a minute, if his mission should demand it — but that he would do everything in his power not to waste their lives unnecessarily. And they know that he will not spare himself in any way — he is a "professional soldier" in the best sense of the word.

In his sense of values, carrying out orders is foremost — but not in a stupid or mechanical way. He has been known to tell a fresh young second lieutenant to shut up and let him, Buck Padooka, handle the situation in his own way, when it was apparent the second lieutenant would have simply gotten men killed for nothing. He always obeys orders, when it comes right down to it — but he won't stand to see his men killed unnecessarily for the sake of someone's promotion or of covering up incompetence.

His virtues, then, are his experience, professional integrity, toughness (in both body and character), his complete confidence in himself and his willingness to undertake any mission. For the rest of it — the promotions, the medals, the honors, the engaging in what he calls "newsreel soldiering" — he has no concern. He has a record of getting the job done, of taking casualties when they have to be taken, but also of taking far fewer than any other squad engaged in the same kinds of missions.



ACTING CORPORAL RODNEY "RICH-BOY" RICHFIELD

RICHFIELD was expelled from some of the best prep schools in New England, kicked out of Harvard after six months for getting a pregnant cow stuck in a stuffy Dean's pretentious birdbath, denied readmittance despite an offer from his corporate-president father to put a million dollars into the endowment fund, and finally enlisted out of boredom and a desire to be "where things were going on." After a hasty basic training course in the infantry and a hurried shipment out to a combat division, "Rich-Boy" struck, peculiarly enough, his own "home" there. At last forced to deal with realities he had long ignored or been unaware of, seeing men alive one moment and dead the next — for no apparent reason of logic or justice — surrounded by men envious of his former advantages, he began to change very quickly. An intelligence never seriously used for anything except thinking up pranks and shocking authority began to find itself valuable in finding ways to accomplish a mission and keep men alive in doing so; a compassion never before finding outlet in his privileged environment began to flower within him for men who would have been, to his former peers, merely crude, often inarticulate, sometimes stupid, nearly always tasteless louts of the lower classes; a determined will knowing nothing more serious than a desire to get a laugh from his classmates has revealed itself capable of persistence before the greatest difficulties, resilience before the deepest despair, and even, though the word would never be consciously used by either him or his fellows, bravery before paralyzing dangers.

Still in many ways a contemptible "rich boy" to the men in the squad, not especially well endowed with bodily strength, speed, or dexterity, he nevertheless was the

obvious choice, in the minds of all, to succeed to the position of corporal when the previous assistant squad leader had been killed by a sudden and unexpected machine-gun burst. Without the long years of experience of the squad leader, Sergeant Buck Padooka, he has learned fast and is in some ways quicker than the old vet himself at seeing a new approach to an impossible problem. But he has the good sense to realize that his strokes of brilliance are useful only part of the time — and the old sergeant's certain knowledge from experience has to take precedence on many other occasions. More than any of the others, he can see the sergeant's deep concern for his men, can see the continuing conflict between that concern and the squad leader's need to violate it by risking them again and again in each new day's challenge. He has come to see this "authority" as no longer an evil to be resisted at all costs, but as a kind of terrible, soul-wearying responsibility that cannot be passed on. "Rich-boy" Richfield knows he cannot relieve the veteran sergeant of this terrible burden — but he has come to see the need to do what he can do to lighten it. And he does.



P.F.C. LUIGI BASTINELLI

BASTINELLI is a swarthy-faced, broad-shouldered, heavily-muscled weight-lifter from Chicago. He spent most of his high school years hanging out in a gym conditioning his body on a whole battery of machines before a tier of mirrors. He takes a reverential, even a religious attitude toward his physique. Every morning — in camp, on leave, or in combat — he finds a way to do fifty push-ups, after which he likes nothing better than to take his shirt off and flex his muscles before any available mirror, dirty window, or mud puddle — anything which will cast back to him that marvelous reflection. His great strength was at once recognized and rewarded by being assigned to carry and control the squad's BAR (Browning Automatic Rifle). He takes the assignment as a just reward for his muscular prowess, and unlike most BAR men, doesn't even want anyone else to relieve him of his favorite weapon on a long march. And he is good with it — solving the usual problem of how to keep an adequate ammunition supply by carrying more than twice the usual quota in special bandoliers he has devised. While rather slow in both body and mind, he is a dependable rock around which to build a base of fire at any time. Sergeant Padooka has learned to make him the first man into line, knowing he will surely stay there as long as told to, and then will be the last man out.



P.F.C. ALOYSIUS "GUNNER" GARRITY

GARRITY is an Irishman from the Bronx whose greatest pleasure is getting into a drunken brawl in any convenient bar, saloon, or P.X. Of medium height and build, with the curly-brown-haired, square-jawed, masculine good looks that drive girls of every nationality wild with desire (at least to hear him tell it), he is

indeed a good man in a scrap. He is a tough-talking big-mouth who enjoys fighting almost as much as he does talking about it. Not especially strong or fast, he is nevertheless hard and tough. Though a good marksman with a rifle, his great joy is to get behind a 30-caliber machine gun with a good field of fire in front of him. Perhaps he feels that a fast talker ought to be able to shoot that much faster than an ordinary rifleman. He learned the skill while in a weapons platoon, from which he was transferred by an angry platoon leader after an especially noisy and damaging drunken brawl at the main post P.X. Given a mere rifle upon his transfer, he handles that weapon well, but looks upon it as not quite equal to his real talents, and on more than one occasion has walked off with a 30-caliber light machine gun for which the gunners had become casualties (and in one case, to the consternation of his commanding officer, with one which he had agreed to man for a few minutes for a couple of thirsty gunners, who when they returned found both Garrity and their machine gun had disappeared). In most other respects, "Gunner" Garrity is an average soldier, somewhat low on discipline and high on talking tough and brawling — but when it comes to marksmanship, he is recognized as among the very best in the outfit.



P.F.C. LEE CHENG is, to the squad, truly the "inscrutable Chinese." All they know about him are really two things: he comes from San Francisco, and he is an expert in anything which can be made to explode. TNT, dynamite, nitroglycerin, even plastics are as familiar to him as the specially made army shoes he puts on every morning (his feet are so small the supply sergeant couldn't find a regulation issue anywhere near his size). For he is small in every respect — with a small, delicately shaped head, "bean-sprout" arms and legs, a waist not much bigger, and fingers that remind one of thin, strong wires. And those fingers can manipulate detonating wires like the fingers of a magician. He says little, his eyes show little emotion, and when he is working with one of his favorite explosives his entire face and body become the epitome of intense concentration. Not at all strong (except for those fingers), slender as a reed, he nevertheless will happily undertake to defuse a strange new type of German mine while all those around him are cringing and having to restrain themselves from running in panic. But to Lee Cheng it will be just another interesting new problem. His fellow squad members talk vaguely and suspiciously of his probable background in "tong wars" or the "Chinese Mafia." Actually, he is the son of a grocery store owner — he had a routine schooling in San Francisco and worked after school in his father's grocery store. His interest in explosives came from his own library research after an exciting Chinese New Year's celebration. Then after graduation from high school, he worked a few months for a mining company, during which time he went from apprentice to expert in explosives in about two months. The army is to him merely another wonderful opportunity to work with his favorite playthings. An indifferent marksman, and with an arm which can lob a hand grenade hardly far enough for his own safety, his knowledge about and skill with explosives make him one of the most valuable and dependable men in the squad.



P.F.C. CHARLES "CHIEF" LAWSON, born and living his first few formative years in the desert Southwest, learned at an early age to move with the stealth of his Apache ancestors, most of whom had died fighting the intruding white man. Living on the reservation he had heard the stories of past glories and bravery, usually coming to a tragic end. There he had learned to run like the desert jackrabbit, to exist on the apparently barren desert for days at a time by himself, to find his way by the stars, to surround himself with the subtly bittersweet pleasure of his own loneliness.

It was a traumatic experience when his father decided, while his son was in his twelfth year, to take his family to Los Angeles. What followed was an oft-repeated story: his father, finding work only with great difficulty, and then liking it less and less, turned to his few Indian friends for extended drinking bouts, until he was finally killed by a speeding auto while lying beside a highway. The son did his best to help his surviving mother and the three other children, attending school as required, but living most of the time in the desert loneliness which he kept always in his head and longed to return to.

With the war came a chance at least to leave his squalid surroundings. He volunteered and found hiking all day, carrying a full-field pack and rifle, then sleeping on muddy ground in the rain, no trial at all. This was a life in some ways closer to the life he had yearned for. Quiet, ever observant, moving like the breath of a subtle breeze, he was immediately recognized as the best "scout" in his entire outfit. One of the original members of the squad, he has always served as its scout, even though those who came to know him realized he had the intelligence and judgment to move to a leadership position. He simply wasn't interested in that. He was born to scout, to lead the way, making each day's mission a new challenge, a new opportunity to prove himself worthy to those ancient warriors of whom he had heard all the wonderful and tragic tales told by the old men, while the quiet noises of the desert night played a soft requiem to the recurrent bravery, the stubborn refusal to be conquered, and the final tragedy.



PRIVATE WALTER "DOC" WHEELOCK is tall, gangling, clumsy, and near-sighted. He wears steel-rimmed glasses which are always drooping low on his long nose, giving him a solemn and scholarly appearance. A relative newcomer to the squad, he is still regarded with some uncertainty by many of his fellow squad members. First of all, he takes little interest in "rest and recreation" hell-raising, being much happier spending his spare moments writing daily, lengthy letters home to his wife, who lives with their newborn child in a small town in Oregon. A bookkeeper in civilian life, he has the harassed look of a man always trying to straighten out the accounts of careless or dishonest clients. While his marksmanship is such that

his fellow soldiers swear there's as much chance he'll hit them as the enemy, and he himself avoids the need to hurl a hand grenade except in a desperate situation, he is probably not very much below the average of the squad in either of these skills. It just seems to them all that he is because of his gawky appearance, his nervous and fussy manner, and perhaps most of all because, when not writing letters home to his wife, he likes to read books — paperbound armed forces editions which he carries around in place of extra rations or ammunition. So wrapt up in his reading does he become that, on at least one occasion when the squad had to pull out quietly and leave a position to the enemy to occupy, everyone else was a half-mile away before they realized "Doc" Wheelock was not among them. Sergeant Buck Padooka hurried back and found him in time — seated contentedly in the bottom of his fox-hole, reading *War and Peace*. Yet, apart from his tendency to lose himself in book-reading or letter-writing, he is perhaps the one member of the squad who can be most trusted to carry out detailed tasks, however petty, without fail. Devoid of either cowardice or desire to be a hero, he fights the war as if he were still keeping books.

him for the draft. Even then his mother decided to let him go only when she saw it was the army or jail, and she feared the effects of the latter more than the former. Her fears that he would be unable to bear up under the horribly violent and sinful ways of the army were hardly borne out. His size protected him from the hazing such an innocent and gentle youth might ordinarily have had to undergo — and when he had joined the squad with whom he would see combat, it seemed impossible for any of them to dislike such an unthreatening, completely friendly, helpful giant of an overgrown boy. Slow-moving from habit, his strength enormous, his only problem is his difficulty in drawing a bead on a human being and pulling the trigger. He can do it when the lives of his friends are endangered — but it is never any pleasure to him. Once when Gunner Garrity, in a moment of rage, seemed about to shoot a prisoner, "Big Ol'" Hoss had taken the Irishman's rifle from him, slammed the butt against a tree until it had splintered to matchwood, and then told him sternly he must never even think of doing such a thing again. Characteristically, ten minutes later the big man was scurrying about helping Garrity find another rifle butt with which to fix his rifle.



PRIVATE BEN

"BIG OL'" HOSS is not only the biggest man in the squad, but probably in the whole division as well. He towers over them all, though he is the most quiet-spoken and gentlest-mannered. Born and raised deep back in the hill country of Tennessee, he was brought up by a mother who had a deep hatred for the brutalizing effects of a life devoted to moonshine, hunting, and "manly" violence.

She had given over the rest of her children to her husband, who personified all that she hated. But her "baby," Benjie, she kept to herself, fiercely fighting off every threatening, brutalizing influence. Baby Benjie was happy to grow as she wished, and even as he grew tall and hard-muscled, his face maintained its soft, gentle, wondering expression. While others hunted and killed the animals of the forest, he would be mending the broken wings of birds, nursing back to health whatever wounded deer, coons, or chipmunks he chanced upon. Towering over his fellows, without an ounce of fat on his large frame, he seemed to realize as instinctively as the elephant that he must tread with care among smaller, more fragile creatures. He has never had a fight in his life. The one drunk who dared to attempt to start one with such a huge young man was not even hit back; little Benjie simply held him off while the man swung his arms futilely until he seemed to tire of the useless effort, then gently picked him up and carried him outside to sit him down carefully in the shallows of a cold creek so he could "cool off a little" before getting himself hurt.

As the boy became a youth and then a young man, his one contact with the "outer world" was listening to Grand Ole Opry on the third-hand radio father had brought home from a trip to the city. His greatest pleasure was listening to and imitating, in a pleasantly nasal voice, the singing of Roy Acuff, his idol.

News of the war penetrated slowly into his neighborhood, but he never would have enlisted against his mother's will. So "they" finally had to come and get



PRIVATE MAROOT "ROOT-TOOT"

MAROOTLAN is as volatile as dry ice on a summer day, as unstable as nitroglycerine being transported on a bumpy road. A head of shaggy black hair is firmly planted above his broad, heavily smiling or equally heavily scowling face. His square and stocky build is misleading, for he was an all-conference

fullback in high school — one who ran with instantly accelerated speed and shattering power. He is clearly the noisiest soldier in the squad — whether laughing his loud, ear-shattering bellow, or shouting angrily at anyone or anything that has aroused his ire. On the march, every branch in his face is blasted with horrible imprecations, every rock or obstacle in his path becomes a subject for fearsome and often original curses. In a physical fight he can be awesome, and his aim and range with a hand grenade are among the best in the squad. But when it comes to marksmanship, he is too impatient to aim with care and squeeze slowly. Consequently, on the firing range he saw little except "Maggie's drawers" — the red flag indicating he'd not only missed the bull's eye, but the entire target as well. So, in his combat career, he managed to trade his M1 rifle for a Thompson sub-machine gun, with which he does much better. For with this he doesn't need to aim and squeeze carefully; he just points and sprays — usually with deadly effect, if the range is close enough. Where speed, power, and energy are important, he is the man for the job; where calm judgment, or patience is required, he takes his place at the rear of the line. Of these facts everyone — especially Sergeant Buck Padooka — is aware. So his talents are rarely wasted, and his weaknesses seldom allowed to surface. Noisy, griping, ridiculing, telling foul jokes or implausible tall stories, he talks more than anyone else in the squad — and usually, even in his angry moments, leaves them all entertained and entranced by the forceful expression of his every mood.



**PRIVATE DENNY
"DIM-WIT" DUMKE** is a puzzle, a trial, and a joy to all other members of the squad. A short, solidly built soldier with an unfailing good nature and a perpetual broad grin on his boyish face, he looks at the world through brightly innocent blue eyes beneath a shock of curly black hair. He is a puzzle because they all claim they don't

understand how he could have passed the intelligence examination to get into the army in the first place. Gunner Garrity's theory is that some clerk, typing out Dumke's IQ score on his personnel record, figured nobody could have one that low and somebody must have left off the first digit, so he helpfully added a "1" in front of the two numbers he was copying. This addition of a hundred points, Gunner asserts, would bring Dumke up a few bare points above average. Root-toot Marootian, however, argues that a doctor, looking with an instrument into one ear, saw nothing except light coming in from the other ear, and the sight so unnerved him that Dumke had been passed along and sworn into the army before the medic came out of his state of shock.

Although these may be exaggerations, "Dim-Wit" is something of a trial to the squad because, if left to himself, he tends to get into trouble. It isn't so much that he's as dim-witted as they claim; it's just that he's both very naive and curious — and apparently without an ounce of fear in his entire body. He's always without money because somebody's always cheating him out of his pay almost before he's collected it. Back in barracks life he could

always be tricked into being available for week-end K.P. so his "friends" could get away on pass. In combat he always obeys orders and never runs, no matter how rough or hopeless the action becomes. But he is not one to handle sudden decisions or changes of plans. And his curiosity is as insatiable as a young puppy's. Once the squad was halted outside a small village, with the enemy stopped just outside the other end and shelling it with artillery and tank fire. While everyone else was pinned to his hastily dug fox-hole, Dumke had gone down into the town and ferreted though all the houses, looking for interesting souvenirs. The squad thought they had lost him when the Germans counterattacked and swept back into the village. But shortly after, Dumke had come crawling out ahead of the advancing Germans, bearing proudly a family photo album, two golf clubs, the "X-Y-Z" volume of an encyclopedia, and somebody's stamp collection.

Despite all these facts, he is still a joy to everyone in the squad for the simple reason that nothing, absolutely nothing, can diminish his good nature, erase the broad grin from his face, or convince him that people are anything but very nice and friendly. Ten seconds after being conned out of his month's pay he can be laughing loudest at the jokes of the con-artist himself. When made the butt of a joke — as he constantly is — he seems to enjoy it as much as anyone. There is something within him which makes insecurity an impossible state for him to achieve, so he is never worried about proving himself equal or superior to anyone else. Therefore he can even enjoy laughing at himself. Thus it is that everyone likes, perhaps even loves, the stolid little fellow, and they're always looking out for him, even as they ridicule him. For his part, they are all his "friends," and if any one of them is ever in trouble, he is the first one to rush to his aid, without the slightest pause to figure the odds.

WEHRMACHT SOLDIER DOSSIERS



**FELDWEBEL
(Sergeant) KURT
REICH** was a 16-year-old private in the trenches at the close of World War I. Now he is back in the ranks of a new German army, this time as a veteran non-commissioned officer of infantry. A man of better than average intelligence, possessed of a more-than-forty-year-old body in much better

condition than most of those twenty years younger, and with an iron will demanding tight discipline from himself and everyone under him, he is less a product of the Hitler school of soldier than of the old Wehrmacht. He looks

with jaundiced eye on much of the political propaganda he hears fed to the army and the people back home. He has been through too much, seen too many hard, cold truths to ever be misled by the outpourings of a Goebbels. He has a certain contempt for those "pure" Germans of the Nazi party, for their excesses of zeal in dealing with their political enemies. But he knows many of them make excellent soldiers — at least insofar as being able to face danger and perform a difficult task is concerned. So he takes them as they come, and he uses them to carry out the missions given him. What he feels about them is of no matter.

He saw Germany torn to pieces after the first world war by economic disasters, saw a frightened people finally turn in panic to a Führer who did not hesitate to use the power given him. Kurt Reich, during this time, worked

hard every day as a forester, drank his beer at night, took his own simple pleasures as he could, and drifted down the years. Something of himself had been left back there in the trenches with his sixteenth year. Marriage and a family were not for him — it was as if he were waiting patiently for the world which he once knew to come again and make all the current concerns of his countrymen no longer important.

He could see it coming, and he joined the Wehrmacht before it was overrun by the hell-Hitler types. His values were of a different type than theirs, but he knew they would all have to exist together in the same army. So he insisted only that they follow his orders, that they save their political nonsense for their off-duty hours. When he ran a squad, by God it ran by the rules of the old German army.

And so he had gone through all the campaigns of East and West, being wounded on three separate occasions, yet always returning to duty, though with a different outfit each time. No matter — given a squad, he soon had it shaped up to do its duty. He didn't think beyond the next day's attack. Most of the rest was all talk anyway. What it came down to, after all the fine speeches, was that an infantryman would have to go in and get his butt shot off, and then you'd still be about where you were before.

Well, let them harangue as they would — he did his job and he didn't shoot prisoners. He knew then the army got the hell beat out of it — in Stalingrad, and in North Africa. He had known the victories also. Poland, France, those first weeks in Russia. Only lately it was few victories, and many defeats. Well, that was not his problem. He would lead his squad, carry out his orders. And when someone would turn on a radio to hear the latest from Herr Goebbels, or maybe even the Führer himself, he personally would take a walk. The air was cleaner out in the open.



UNTEROFFIZIER (Corporal) WOLFGANG "ACHTUNG! ACHTUNG!"

KLEINDORF is a portly little man of exaggerated military bearing, whose main purpose in life is to live up to the prestige and honor he feels are implicit in his designation as "unteroffizier." He is the slightly smaller mirror image of his

father, a pompous and pretentious burgomaster of a small village just barely large enough to have one. Wolfgang has grown up standing at attention or stiffly parading alongside his father, in whatever celebration or holiday could be used as an excuse for such behavior. They had made quite a sight together, the grown man and his son, both with tight little bellies proudly thrust out, standing side by side with flags draped around them and the citizens of the village looking up to them with appropriate awe. With such a background during his youth, it was inevitable that little Wolfgang, when he was of age (he seemed to go suddenly from boyhood to middle-age) should offer his services to the military establishment of the Fatherland.

As a soldier he was impressive for his attention to discipline, his care for his appearance in parades and reviews, and his eagerness to carry out every order scrupulously and rigidly. There was something very

pleasant to him in standing before a group of soldiers, thrusting back his shoulders (which would make his firm little belly protrude) and shouting in staccato voice: "Achtung! Achtung!" So, inevitably also, he was made an unteroffizier.

To his superiors he is a dependable quality who can be trusted completely to do what he is told. But they are wise enough not to raise him above the rank he holds — thinking on matters beyond a satisfyingly barked out "Achtung! Achtung!" is clearly not in his area of strength. To the men in the squad he is a bit of a joke, and when they speak to each other of him, he is always referred to as "Old Achtung! Achtung!" Mercifully for himself, Wolfgang Kleindorf is not possessed of sufficient sensitivity to recognize ridicule when he sees or hears it, and so he is quite content to be where he is — a "leader" in the grand military efforts of the Fatherland.



OBERGEFREITER (P.F.C.) OSKAR ZIMMER

ZIMMER is a tall, well-built, proud man who joined the Hitler Youth movement early and found there a natural home for all his national and personal arrogance. Physically strong, he was among the leaders in terrorizing Jews and Communists before the war. With the war came his chance to put

all the assumptions about his own and German racial superiority to work in earnest. His experiences in overrunning first Poland and then France quickly confirmed him in all his political and racial beliefs. Truly, the Führer had been right: these inferior peoples needed a German state to organize them and keep them within a firm Order.

North Africa seemed added confirmation. After the Italians had been badly routed by the British, Zimmer was one of those sent there under Rommel, and the triumphal passage to El Alamein seemed final testimony to the German soldier's ability to conquer anyone, anywhere, regardless of the superiority in numbers or equipment.

Then came the British attack under Montgomery. As the German positions began to collapse, Oskar Zimmer only fought harder. He believed, like the Führer, that all that was needed was stronger effort and all would yet be well. A shell from a British tank ended his efforts on that front. Sent home for a long recovery from his serious wound, he was finally returned to duty with an ordinary Wehrmacht division. He serves there now, with his arrogant pride undiminished, having little contact with his fellow soldiers, no longer certain of his understanding of events — of defeats in the East before hordes of inferior Russians, of failure in the West to drive the mongrel Americans back into the sea. He glowers inwardly, knowing something is badly wrong with the world, but never once questioning his cherished concepts of his own and German superiority. His contempt for the enemy is revealed in the callousness with which he kills, regardless of circumstances. That contempt has now extended until he feels much the same toward most of the members of his own squad, who seem to have lost that fiery commitment which sent him and his earlier comrades, most of them now long dead, crashing over the European borders, creating havoc and terror among the inferior nations. A rifle is no longer enough for him to express his contempt, so he has taken a machine pistol as his fitting

instrument of destruction. With it he will expose himself recklessly to kill the enemy, to mow down even those trying to surrender to him, and, on one occasion, to spray contemptuous bullets into one of the members of his own squad who was trying to surrender to the Americans. Marksmanship is not his concern; he lives with an inward simmering cauldron of arrogance and hatred, and a hidden despair he cannot begin to admit, even to himself.



OBERGEFREITER (P.F.C.) ERICH ALLBRECHT

ALLBRECHT is a scholar. He graduated from the University with a major in history, a subject for which he has always had a passion. He has taken seriously the ideal of history scholarship as a search for objective truth, regardless of present political pressures.

Unfortunately, he graduated just in time to find Hitler extending his influence and control even into the universities. Consequently, he has never worked as a professor. Instead, he eked out a livelihood as a librarian while he worked on his favorite subject: European diplomacy during the Napoleonic wars. Since he has never published, he has been bothered very little by authorities. His views are such, however, that if he had ever made them public, he would have been lumped with the Communists and the Jews by the Nazis.

Called into the army during the early days of the Russian campaign, he has been content to do what was required of him, but not to make an effort for the promotion which he obviously could have had if he had wanted it. Extremely intelligent, of at least average ability in the physical skills of soldiering, he has only one serious defect — lack of "patriotic feeling." He has chosen a withdrawn attitude toward the war — he sees the faults of his fellow soldiers too clearly to accept them as men to establish a grand New Order for the Western World, but he sees no reason to be noisy about his views. Consequently he has kept out of serious trouble, as his service as a soldier has been highly competent. But sometimes he looks at "comrades" like Oskar Zimmer and wonders what good the suffering of the war can possibly lead to.



OBERGEFREITER (P.F.C.) LUDWIG "LOVER" SCHNEIDER

SCHNEIDER is the blond, blue-eyed, handsome Aryan eulogized by the Nazi party. But he is a bit of a dandy about his appearance in uniform, and he is more interested in frauleins than fuhrers. An average soldier in most respects, he is much more impressive in parades than in

the heat of battle. He has a girl waiting for him in Munich, another in Nuremberg, and another in Cologne. He also has a French girl in Paris, and another from his tour of duty on the Normandy coast. He has been known to interrupt patrol duty to seduce a girl who happened to be in the area ("targets of opportunity," he calls them).

Generally, the war to Ludwig is a horrible inconvenience, and he would prefer to be in the rear area — or out of it completely, if he didn't have his military appearance to keep up.



OBERGEFREITER (P.F.C.) ERICK BRAUN

BRAUN lived for many years in the Sudetenland when it was part of Czechoslovakia. As a German, he prayed for the day when his "homeland" would be returned to its "rightful" owner, and he was overjoyed when Hitler bluffed and threatened and blustered the Western powers until it was given back

to Germany. Erick Braun, a big, tough factory worker, immediately joined with the conquering Germans to put the Sudetenland firmly under the German control. If someone had to be beaten up, Erick Braun was the man for the job. And he saw that all those with "pure German parentage" took a properly superior attitude toward their former countrymen.

When the Germans began to build their army for the overrunning of Poland and France, he eagerly joined the ranks, and he has been a solid, not-too-fast-witted, dependable soldier in the ranks ever since. His strong, powerfully built, factory-worker's body is always at its best with a hard physical challenge to overcome. And he has soldiered long enough to be a trustworthy man in a difficult situation — he will know how to respond to emergencies, unless they are highly complex and unique ones. Perhaps because he is a mediocre marksman, however, he prefers to use a machine pistol as his weapon when one is available to him. He has served in Russia, briefly in North Africa, and on the Western front. He is one of the most experienced and able soldiers — so long as nothing highly unusual or unprecedented occurs.



OBERGEFREITER (P.F.C.) HANS GRUBER

GRUBER was for three glorious months a member of the Luftwaffe. He flew bombing raids during the days when there were plenty of bombing planes and little opposition from either fighter planes or anti-aircraft. Then the glorious months ended, the long war with Russia began, his plane

was shot down, and it was decided there was a greater need for infantrymen than for Luftwaffe. So he was transferred to a division on the Russian front, where he swallowed his disappointment and did his best to perform well. A good marksman, a former track star in the one thousand meter race, and possessed of a strong sense of discipline, he is felt by his superiors to be the kind of model soldier the Fuhrer wants for his armies. So Hans slogs along, forgetting his moments of glory in the Luftwaffe, fulfilling all the demands made on him. The one skill which he learned in the Luftwaffe (and which still has some use in his present position), his ability to fire a

machine gun, can be tapped when necessary, and only then does he have, for a few moments at a time, that feeling of soaring power which reminds him of his glorious days aloft.



GEFREITER (Private) KLAUS MULLER

a big strapping farmer from Bavaria, was kept out of the war for some time because it was felt his overgrown body and slow wit would be of more use to the country if left on the farm. This decision was not especially pleasing to him, for he had felt all the patriotic urges that had run through the nation since

the war had started. A military band would make him visualize himself doing great deeds of valor on a foreign field — and then coming home to bask in the approving glow of the buxom and (to him, at least) beautiful Marlene Bittendorf, who worked on a nearby farm and had not completely turned aside his advances. He tried to read about the war in the papers and magazines, but mostly he looked at the pictures and imagined how it would be if he were there.

Then, as the casualties in Russia began to increase, he was finally called up. Sensing that his slow-moving mind did not belong at the controls of an ME109 or a Mark V tank, he was quite content to be sent to an infantry division. His first battle experience was in Russia, where most of his dreams of the glory of war were lost in the snow, the cold, and the general butchering that seemed to go on and on. At first he couldn't feel the approved sense of superiority and anger toward the Russians he saw. They struck him as very much like himself — probably many of them were also farmers who, like himself, had to leave the more glamorous positions for those with nimbler minds.

Then he was wounded and sent home to recover. There he found his beloved Marlene had run off with a furloughed pilot from the Luftwaffe. Upon recovery he returned dutifully but glumly to his division, now transferred to the Western Front. He performs his duties to the best of his abilities — the strength of his body making up for his lack of nimbleness in both body and mind. But the war no longer has wonderful possibilities for Klaus — he would like merely to go back to his farm, to his Marlene. And then he remembers that there is no Marlene any more, at least for him, and he carries out his orders and tries to keep his mind from thinking beyond the tasks and the dangers of one day at a time.



**GEFREITER (Private)
DIETER DUSEL**, whose name translates literally as "dunce," is the clown of the outfit. An expert marksman with a rifle, possessed of a good throwing arm for the potato masher grenade, Dieter would rather clown around and make everyone laugh than fight. The one most likely to be AWOL, or to turn up drunk for an

important review, he fights well when he has to — but tries to arrange it so that he fights as little as possible. He prefers schnapps to patriotic speeches, women to politics, and goofing off to any duty whatsoever. Despite his "dunce" name, he is actually quite intelligent, and three times has been promoted to Unteroffizier — only to be broken three times for his happy-go-lucky attitude toward his duties. He prefers to remain a mere gefreiter (private), a rank in which his impersonations of Herr Hitler are less likely to get him into trouble.



GEFREITER (Private) MAX WAGNER

is a small man with little in his appearance to impress anyone. All his life he has been the object of unpleasant treatment by bullies and show-offs. His very appearance reminds one of a frightened rabbit. Despite his lack of physical strength and his diminutive size, he is always ready to do his duty — though he would be much happier to be allowed to go home to his two loves: his work as an automobile mechanic and his hobby — listening to grand opera and playing its arias on his accordian. Before the war he had loved nothing more than trouble-shooting a complex mechanical defect in a Volkswagen while listening to an opera on his phonograph. As a rifleman in an infantry division there is little time for either of these personal joys. The closest he can come to satisfaction in his army environment — which he has submitted to for years — is working on a job involving the use of explosives. In this area he has become something of an expert. He also finds satisfaction in playing remembered operatic arias on the little squeeze box of an accordian which he has always managed to carry with him — from Paris to Stalingrad and back. The war to him is simply a state he feels he can do nothing about, and when forced to listen to a radio-broadcast harangue from the Fatherland's Fuhrer, his mind is busy singing beautiful, tragic arias to himself.





If you have any questions or problems regarding the program or game, please send a self-addressed, stamped envelope with your question to: Strategic Simulations, Inc., 883 Stierlin Road, Bldg. A-200, Mountain View, CA 94043-1983; or call (415) 964-1200 Mon., Tues., Thurs., or Fri.; 1-5 PM (P.S.T.)



**COMPUTER
AMBUSH**
from Strategic Simulations Inc.

SECOND EDITION

SQUAD CARD ORDER SUMMARY CHART

MOVEMENT ORDERS

		Variable	Order	Code	COSTS	
		X (8.1)	Regular Irreg.	R I	Normal 2 x Normal	Normal 2 x Normal
Movement orders of form:		d (8.2)	Diagonal Non-diag. Scan	2,4,6,8 1,3,5,7 0	$\sqrt{2}$ x Normal Normal 10	$\sqrt{2}$ x Normal Normal 1
Mxdnm		m (8.4)	Walk Run Crawl Dodge Look Fall down Stand up	W R C D L F S	20/Sq. 10/Sq. 30/Sq. 15/Sq. 25/Sq. 20 20	1/Sq. 3/Sq. 22/Sq. 15/Sq. 1/Sq. 1 3
Sneaking (9.0)			Sneaking Begin Sneaking End	SB SE	1 1	1 1
Waiting (5.39)			Wait	WAII	II	-

WEAPONS ORDERS

PREPARATION COSTS (12.1)			DROP COSTS (Section 7)			GET COSTS (Section 7)			LOAD COSTS (12.5)			FIRE SINGLE BURST COSTS (12.2)			FIRE ON AREA COSTS (12.3)			
Weapon	Order	Time	Energy	Order	Time	Energy	Order	Time	Energy	Order	Time	Energy	Order	Time	Energy			
Rifle	PR	15	1	DB	15	1	GR	20	1	LR	25	1	FSxxyy	25	5	FAppit	II	3II
Autorifle	PA	15	1	DA	15	1	GA	20	1	LA	30	1	FSxxyy	12	3	FAppit	II	3II
Mach. Gun	PM	40	1	DM	20	1	GM	40	2	LM	50	2	FSxxyy	6	3	FAppit	II	3II
													HAND-TO-HAND COMBAT COSTS (12.8)					
Knife	PK	10	1	DK	10	1	GK	15	1				Energy					
Bayonet	PB	10	1	—	—	—	—	—	—				Order	Time	Offense	Defense		
Garotte	PG	10	1	DG	10	1	GG	15	1				Hand-to-hand in same square	HH	15	20	10	
													Jump to adjacent square	HJII	II	.3II		
Plastic Explosives	PP	20	1	DP	10	1	GP	15	1	EXPLOSIVES USE COSTS (12.6 & 12.7)								
Frag. Grenade	PF	20	1	DF	10	1	GF	15	1	Plastic Explosive	EPTII	50	3					
										Frag. Grenade	EFxxyy	20	.5d ²	d = distance of throw in squares				

NL - List current orders for a soldier

NO - To end writing orders for a soldier

SECOND EDITION

COMPUTER AMBUSH™

SQUAD CARD SOLDIER CHARACTERISTICS CHART

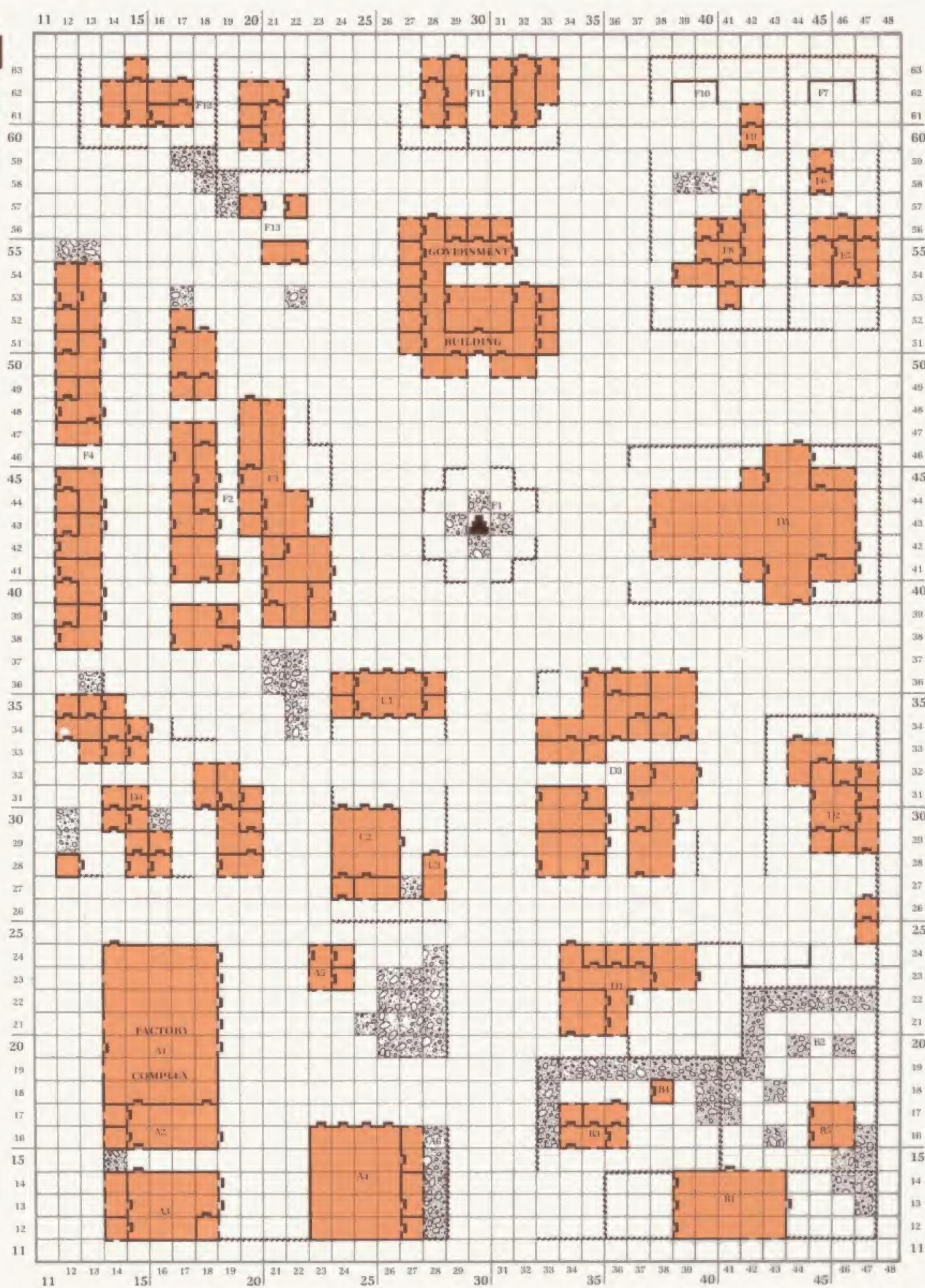


Rank	First Name	Last Name	Weapons	No. of Grenades	Wt.	Strength	Intel.	Dexterity	Power of Observation	Marksmanship	Firing	Hand-to Hand
SGT	J.C.	Padooka	A	2	6	7	7	5	8	7	7	8
CPL	Rodney	Richfield	R	1	6	5	7	4	6	4	5	1
PFC	Luigi	Bastinelli	A	2	10	10	4	5	5	4	8	6
PFC	Charles	Lawson	R	2	6	5	6	8	10	6	4	7
PFC	Aloysius	Garry	M	2	7	5	5	5	7	5	10	9
PFC (P)	Lee	Cheng	R	5	5	4	6	6	8	4	3	2
PVT	Walter	Wheelock	R	1	7	5	5	4	4	4	4	3
PVT	Ben	Hoss	R	2	8	9	4	4	9	6	5	4
PVT (G)	Marooi	Marootian	A	4	8	8	4	7	6	9	4	10
PVT	Denny	Dumke	R	2	6	4	3	6	8	5	6	5

FW	Kurt	Reich	A	3	7	7	6	6	7	6	6	9
VO	Wolfgang	Kleindorf	A	2	7	4	4	5	6	4	7	3
OG	Erich	Albrecht	R	2	6	6	8	4	5	5	8	4
OG	Hans	Gruber	M	1	7	6	5	9	8	4	9	6
OG (G)	Oskar	Zimmer	A	2	8	9	5	5	6	7	3	7
OG	Ludwig	Schneider	R	1	6	5	4	5	5	4	4	4
OG	Erick	Braun	A	2	10	9	4	4	5	4	4	8
GF (P)	Max	Wagner	R	5	5	5	5	5	6	6	7	5
GF	Klaus	Muller	R	2	9	8	4	4	7	5	5	5
GF	Dieter	Dusel	R	2	6	5	5	6	9	10	9	4

(P) = Plastic Explosives Expert (G) = Carries Garrote
WEAPONS: A = Automatic Rifle/Machine gun R = Rifle, M = Machine gun

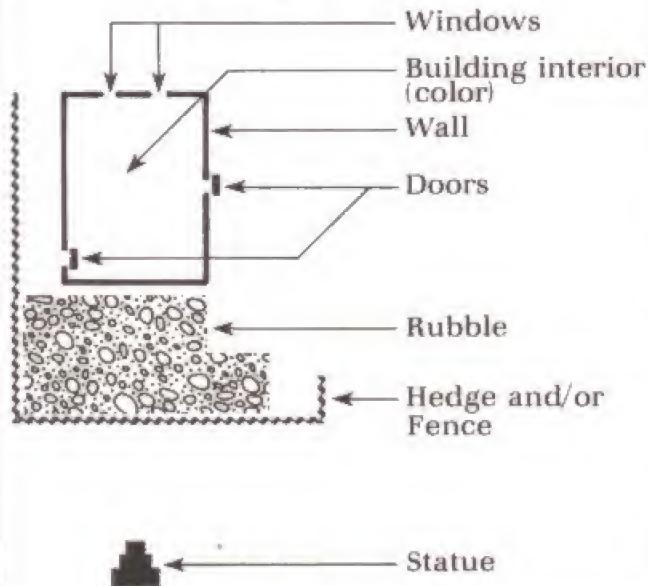
N



COMPUTER AMBUSH™

from Strategic Simulations Inc.

MAP KEY



TERRAIN CHART

TERRAIN TYPE	MAP KEY	VISIBILITY FACTOR	MOVEMENT COST MULTIPLIERS	
			TIME	ENERGY
Wall	—	0%	Impassable	
Window	— —	25%	5	3
Statue	▲	0%	Impassable	
Door	— □ —	50%	2	1
Hedge	~~~~~	50%	4	3
Rubble	● ● ● ●	60%	2	2
Bldg. Interior	□	80%	1.5	1.5

The map you see on your computer screen was created with the aid of Darrell Aldrich's Higher Text program.

The energy and time costs expended to cross a terrain feature is calculated by multiplying the movement mode costs by the terrain cost multipliers. Example 1: To run through a door costs $20 (10 \times 2)$ time points and $3 (3 \times 1)$ energy points. Example 2: To dodge through a window into a rubble square costs $150 (15 \times 5 \times 2)$ time points and $90 (15 \times 3 \times 2)$ energy points.

COLUMN	ROW	A. FACTORY COMPLEX
16	20	A1. Main Shop
16	16	A2. Tool crib/ Supervisor's office
16	13	A3. Misc. work shop
25	14	A4. Warehouse
23	23	A5. Office
28	16	A6. Scrap and junk
27	21	A7. Raw materials and other useable junk
B. FARM COMPLEX		
41	13	B1. Barn
45	20	B2. Small personal crops
35	16	B3. Farm house
38	18	B4. Outhouse
45	16	B5. Tool shed/ work house
C. BUS DEPOT COMPLEX		
26	35	C1. Passenger waiting/ boarding area
25	29	C2. Garage/ Shop
28	28	C3. Tool shed/ Machine shop
D. MISCELLANEOUS		
36	22	D1. School
45	30	D2. Hotel/ Rooming house
36	32	D3. Small shops
15	31	D4. Crummy complex of proletarian houses (i.e., workers' homes)
43	43	D5. Church

COLUMN	ROW	E. GOVERNMENT BUILDING
30	53	F. MORE MISCELLANEOUS
30	43	F1. Statue
19	44	F2. More small shops
21	45	F3. Small cafe
13	46	F4. Light industries and shops
46	55	F5. Upper class/bourgeois home
45	58	F6. Servants'/ Gardener's home
45	62	F7. Garage
41	55	F8. Mayor's home
42	60	F9. Servants' quarters
40	62	F10. Garage
30	62	F11. Middle class homes
18	62	F12. More middle class homes
21	56	F13. Gas station/ garage



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