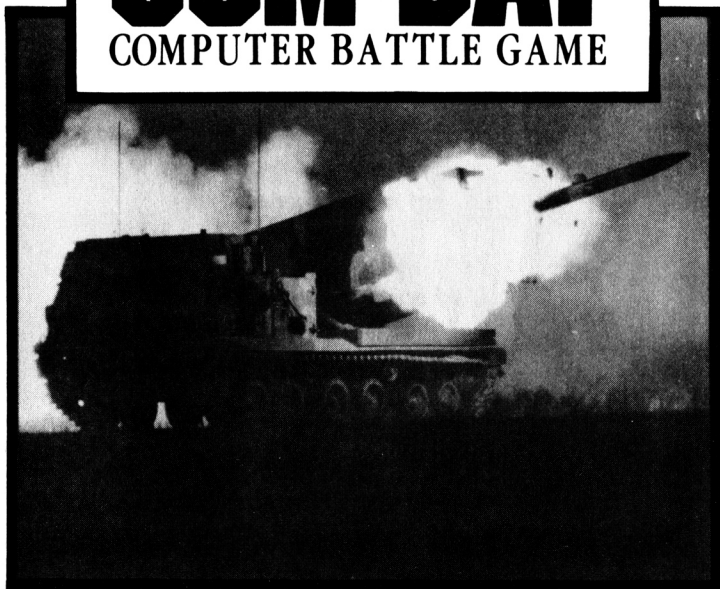


OPERATION
COM•BAT
COMPUTER BATTLE GAME



Merit Software

OPERATION COM•BAT

Computer Battle Game

Concept, Design, Computer
Graphics, Programming, & Manual

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GENERAL OPERATION

Copying the Game Disk

OPERATION COM•BAT is not disk copy protected. It may be copied using any of the regular disk copy routines appropriate for your computer. If you are unfamiliar with these procedures, please read your computer manual for the particulars of disk copying.

Before using OPERATION COM•BAT for the first time, we recommend that you make a working copy of the disk. Be sure that the name of the copy matches that of the master program disk.

Loading (Amiga)

Just follow the regular power up sequence for your Amiga. When your Amiga requests the 1.2 Workbench disk, please insert the OPERATION COM•BAT working copy in the internal disk drive. OPERATION COM•BAT will then boot.

If you have only 512K of ram in your Amiga, any external drives attached to the system must be removed.

If you copy OPERATION COM•BAT to your hard drive, two following two assigns must be placed in your startup-sequence so the game files may be located in the *OP_COM* and *OP_COM_FILES* directories.

assign OPCOM: <hd>:OP_COM

assign OPCOMFILES: <hd>:OP_COM_FILES

1 Loading (Macintosh)

2
3 Operation COM•BAT is not shipped with System
4 software. The latest System software should be
5 used. If there are problems with the game
6 loading, any memory intensive utilities that are
7 running (i.e. Ram cache, print spoolers, etc.)
8 should be turned off.

9
10 To launch OPERATION COM•BAT, double click
11 on the Game Icon after the disk is inserted in
12 the computer.

13 Loading (IBM)

14
15 Place the OPERATION COM•BAT working copy
16 program disk in drive A: and type

17
18
19 OPCOMBAT <RETURN>

20 When The Program Begins

21
22
23 When the game loads into the computer, the
24 Credits/Copyright picture displays on your
25 monitor. To play OPERATION COM•BAT, click
26 the mouse button or press *RETURN*. A requester
27 will appear and ask you for a manual validation
28 character.

29
30 You will be requested to type in the first letter
31 of a random word from the OPERATION
32 COM•BAT manual. For example, the requester
33 may ask for the first letter from

34
35 Page 12 Line 14 Word 5

36
37 After you find and type in the correct letter,
38 the *Rocky Canyon* Battlefield map will load.
39 OPERATION COM•BAT is now ready to begin.

1 Mouse and Keyboard Control

2
3 All OPERATION COM•BAT actions are controlled
4 via the mouse.

5
6 IBM computers without a mouse should consult
7 the appended instruction sheet for IBM play
8 instructions.

9
10 On Amiga computers the left mouse button
11 initiates actions, while the right mouse button
12 displays menus.

13
14 The keyboard is used to input specific *Modem*
15 *and Opponent Parameters*, filenames, and
16 messages when playing between two computers.

17
18 Messages between players may be typed at any
19 time during game play, using the *SEND* and
20 *RECV* lines at the bottom of the display.

21 Verification Requester/Dialog

22
23
24 A verification requester/dialog will appear on
25 your screen whenever you request an action that
26 might drastically effect the current game
27 configuration. The requester/dialog will request
28 an action from the player, and the game will not
29 proceed until a valid response is made.

30
31 These requesters/dialogs are designed to protect
32 you from accidentally initiating an action that
33 may irreversibly change some aspect of game
34 play, or inadvertently break the teleconnection.
35 Please read them carefully before responding,
36 otherwise you may initiate an action that you
37 actually do not want to occur.

OPERATION COM•BAT

Overview

OPERATION COM•BAT lets you pit your military skills against those of the computer in a graphically animated, Computer Battle Game. It also allows you to play against another human player, either on a single computer, or over the telephone with two computers (Amiga, Macintosh or IBM) equipped with modems.

OPERATION COM•BAT provides 6 perspectives viewed, Battlefield Terrain maps upon which the game may be played, Each offers different military problems to be solved by the strategy, tactics and intelligence of the player or players.

These Battlefield Terrain maps include *Rocky Canyon, Jungle Ruins, Desert Dunes, River Meadow, Marshland Bog* and *Archipelagos*.

Four types of animated military attack ordnance are provided, as well as supply vehicles and air support. Game pieces will move, aim and fire on command. To select any ordnance unit, simply point the mouse pointer to any game piece visible on the Battlefield Map, or to one of the positions marked on the Tactical Grid, and press the mouse button. The chosen ordnance unit will now be marked by a surrounding bracket.

To *Move* the selected unit, point to any Battlefield Map location within range and press the mouse button. To *Fire* the selected unit, choose any firing angle from the Firing Cluster, then point to and click on the Firing control.

1 A player's turn lasts until each ordnance unit
2 has either moved and fired once, or the *Turn*
3 *Timer* runs to zero. Play can be passed to the
4 other player at any time by clicking on the *Pass*
5 control once the player has made all the moves
6 he wishes for that turn.

7
8 Each time an ordnance unit is hit by enemy fire,
9 it sustains damage. If it receives too much
10 damage, the piece is destroyed and removed from
11 the Battlefield.

12
13 As units run short of *Ammo* or *Fuel*, they can
14 be resupplied (using the Supply Control Cluster)
15 from Supply vehicles which are positioned
16 adjacent to them. Supply vehicles can resupply
17 only at Headquarters.

18
19 If Air support is activated, it may be called as
20 long as less than *Five* pieces have moved and
21 less than *Five* shots have been fired.

22
23 The goal of OPERATION COM•BAT is to destroy
24 the enemy's Headquarters == not an easy task!

25 26 **Display And Control**

27
28 The OPERATION COM•BAT display is divided
29 into two sections. The upper half display is the
30 *Battlefield Terrain Map*, while the lower half of
31 the display is referred to as the *Control Panel*.

32 33 **Battlefield Terrain Map**

34
35 The Battlefield Terrain Map is a close-up
36 perspective view of the current battlefield with
37 both *Blue* and *RED* (Mac: *Black* and *White*)
38 military ordnance in position. At any given time
39 one-sixth of the Battlefield Map is displayed.

1 Movement and attacks by ordnance units are
2 graphically animated on this Battlefield Terrain
3 Map.

4
5 Generally, only those areas of the map
6 containing a player's unit can be viewed.
7 However, calling *Air Support*, will scroll across
8 the one-third portion of the Battlefield Map over
9 which the Air Support flies == revealing and
10 updating enemy positions as it does so.

11 12 **Control Panel**

13
14 The lower half of the OPERATION COM•BAT
15 display is the Control Panel. The Control Panel
16 is comprised of five distinct areas which provide
17 information, game controls, and a user-to-user
18 interface. These sections are as follows.

- 19
20 «» The Ordnance Status Table
- 21 «» The Tactical Grid
- 22 «» Ordnance Controls
- 23 «» *RECV & SEND* Message Lines
- 24 «» Game Turn Timer
- 25 «» Connect Timer

26 27 **Ordnance Status Table**

28
29 The Ordnance Status Table displays the current
30 status of the selected ordnance. Whether a unit
31 has enough supplies of *Fuel* and *Ammo*, as well
32 as the *Defense* to complete a mission, or the
33 *Gun Range* or *Power* to destroy an enemy, can
34 be determined with a glance at the table. The
35 player is well advised to note the stats of both
36 his own units, and those of his enemy.

37
38 The Ordnance Status Table lists unit data in the
39 following areas.

1 **Ordnance Type** = type of military unit currently
2 selected; either Heavy or Light Armor, Heavy or
3 Light Artillery, Supply Vehicle, Air Support
4 Transmitter, or the Headquarters.

5
6 **Defense** = the strength of a unit, where zero
7 Defense means the unit is destroyed. All units
8 begin with maximum Defense for that ordnance
9 type.

10
11 **Mobility** = the maximum mobility range for the
12 selected unit, where 1 mobility unit will move
13 the ordnance 1 horizontal or 1 vertical square on
14 the Tactical Grid Map (32x20).

15
16 **Gun Range** = the maximum horizontally fired gun
17 range for the selected unit as measured on the
18 Tactical Grid, where 1 Gun Range unit = 1 sq.
19 This range is always limited to grid cells at
20 least partially visible on the Battlefield Map,
21 except for one row to the top and one row to
22 the bottom of the Battlefield Map which is not
23 displayed, but is still within Gun Range.

24
25 **Gun Power** = the amount of damage to be
26 subtracted from the target enemy unit's Defense
27 stat with each successful hit by this ordnance
28 type.

29
30 **Ammo** = amount of ammunition remaining to
31 this unit, where 1 Ammo = 1 Firing.

32
33 **Fuel** = amount of fuel remaining to this unit,
34 where 1 Fuel = 1 cell of movement across the
35 map.

36
37 **Position** = both horizontal (*X grid*) and vertical
38 (*Y grid*) coordinates of the selected unit on the
39 Tactical Grid Map.

1 **Tactical Grid Map**

2

3 The Tactical Grid Map displays the whole
4 Battlefield Terrain Map under a 32x20 grid
5 overlay upon which prominent Battlefield Map
6 features are displayed.

7

8 The Terrain Grid Map displays positions for each
9 unit of the army whose turn is current, and the
10 last known positions of previously detected
11 enemy units. Enemy positions are updated
12 whenever a player selects a friendly unit in the
13 vicinity. Position updates occur only when the
14 map area in question is displayed within the
15 upper Battlefield Map display.

16

17 When a player no longer has any units in that
18 vicinity, it is not possible to view that area
19 without calling Air Support.

20

21 Reconnaissance provides updates on enemy units
22 which are received for the entire one-third
23 portion of the Battlefield Map over which the
24 Air Support flies, each time Air Support is
25 called.

26

27 The selected unit indicates its Tactical Grid Map
28 position by blinking on and off. Another
29 friendly unit may be chosen for action by
30 clicking one of the friendly colored squares on
31 the Tactical Grid map with the mouse.

32

33 Red squares indicate *Red* army units, while
34 Yellow squares indicate *Blue* army units.

35

36 (Macintosh: Hollow Squares indicate *White* army
37 units, while Square Dots indicate *Blue* army
38 units).

39

Ordinance Controls

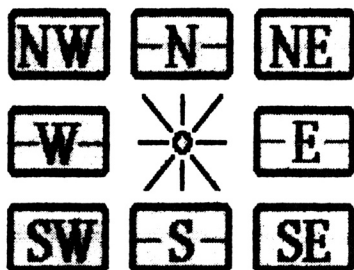
The Unit Command Controls which are used to initiate actions, are separated into four distinct clusters.

Activity controls are *Primary Command*, *Firing Direction*, *Supply* and *Air Support*, and are highlighted when active. Selection controls are *Ammo* and *Fuel* under *Supply*, and *Top*, *Mid* and *Low* under *Air Support*.

Choice controls are highlighted whenever selected and are unhighlighted when they are not selected.

Firing Direction Control Cluster

The *Firing Direction Cluster* highlights the current firing angle for a selected unit. Eight different firing angles are available, one for each of the eight major compass points.



Care should be taken when determining diagonal firing trajectories. Consulting the cells marked on the Tactical Grid Map will provide accurate plots of enemy units that can be hit on the diagonals.

Primary Command Control Cluster

The Primary Command Control Cluster provides controls to page through the unit list in either direction, to indicate *Move*, to *Pass* or *Fire*.



The « and » controls allow the player to page through the entire ordnance unit list for each piece remaining in the game that is being played.



It offers a quick method of determining if all units were considered for action.



The **Move** control indicates whether the selected unit has moved this turn. All actual unit movement is always commanded in the Battlefield Map display.



The **Pass Turn** control is chosen whenever a player has finished unit activity and wishes to *Pass* the turn to his opponent before the *Turn Length Timer* is zero.

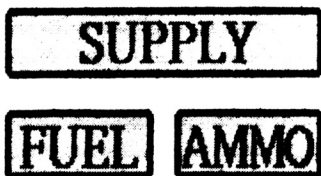
Otherwise the turn will *Pass* when the *Turn Length Timer* reaches zero, or immediately following a call for *Air Support*.



The **Fire** control is chosen to fire the guns of the selected unit. The unit's current firing direction is always indicated on the Firing Direction Compass Cluster.

Supply Control Cluster

A unit may be supplied with either *Fuel* or *Ammo* once during a turn. Supply may occur whenever the supply vehicle is adjacent to the vehicle that is requesting *Supply* (North, South, East, or West).



Either *Fuel* or *Ammo* may be chosen as the material being supplied, and is so marked.

Clicking *Supply* will supply the current unit the maximum quantity of fuel or ammunition allowed for that ordnance type.

Supply vehicles can never resupply each other during the course of a game.

For a supply truck to be resupplied with fuel, it must return to its HeadQuarters.

If a Supply Truck runs out of *Fuel* before HeadQuarters is reached, it is stranded for the remainder of the game.

It is still possible, however, for units to be supplied from this stranded supply vehicle, as long as they have sufficient fuel to reach it.

Air Support Control Cluster

When Air support is activated (see the OPTIONS menu), the Air Support Control Cluster is accessed to control the flight path of an air attack, and to call the attack on the enemy.

AIR SUPPORT

TOP MID LOW

If the Transmitter has not been destroyed, *Air Support* may be called, and as long as less than *Five* units have been moved, and less than *Five* units have been fired. When a fifth unit moves or fires, Air Support is deactivated for the remainder of that turn.

The Air Support *Top*, *Mid* and *Low* controls select that portion of the Battlefield Terrain Map over which Air Support will fly.

The attack plane will randomly strafe 1 of 7 grid rows within the one third map portion that is indicated.

Each enemy unit that is encountered on that selected row will receive *Five* points of damage.

A player's turn ends after Air Support has completed a strafing run on the enemy and has reconned all enemy positions in the flight area.

1 **RECV and SEND Message Lines**

2
3 The RECV and SEND message lines, which are
4 displayed across the bottom part of the Control
5 Panel, are only activated after a teleconnection
6 has been established with another computer. All
7 alphanumeric keys typed on the keyboard will be
8 displayed on the SEND line.

9
10 Message Text will be transmitted to the tele-
11 connected computer either when the *RETURN*
12 key is pressed, or when the end of the SEND
13 line (72 characters) is reached.

14
15 The RECV message line displays incoming text
16 messages from your teleconnected opponent.

17
18 A chime sounds when an incoming message is
19 received to alert the player to read the message.

20
21 With some modems the *RECV* line will echo your
22 SEND message should the teleconnection be
23 broken. On *Disconnect* the SEND and RECV
24 lines are disabled.

25 26 **Turn Timer**

27
28 The Turn Timer displays the time remaining in a
29 given turn. Turn times are set under the Options
30 Menu.

31 32 **Connect Timer**

33
34 The Connect Timer indicates the elapsed time
35 since the latest teleconnection with another
36 computer was made. This is particularly useful
37 for reminding players how long they have been
38 on the telephone.

39

1 **Ordnance Units - The Game Pieces**

2
3 There are seven types of ordnance units that are
4 positioned on the Battlefield Map at the start of
5 each OPERATION COM•BAT game. Each of the
6 three Battlefield Maps offers four game piece
7 scenarios (see the SCENARIO Menu) that provide
8 various unit configurations and placement.

9
10 Each ordnance type differs in *Defense*, *Mobility*,
11 *Gun Range*, *Gun Power*, and unit *Fuel* and *Ammo*.

12
13 It is important that players use ordnance types
14 effectively, together and alone, to maximize their
15 effectiveness.

16 17 **HeadQuarters**

18
19 The HeadQuarters (HQ) for each army is
20 represented by a flagged tent. HQ is a
21 stationary objects and cannot fire on the
22 enemy. Its sole defense rests with the other
23 mobile ordnance units.

24
25 A game is won when a player destroys his
26 opponents headquarters. Conversely, it is
27 important for a player protect his HQ to prevent
28 his opponent from winning the game.

29 30 **Transmitter**

31
32 The Transmitter is a stationary object that
33 cannot defend itself. Its sole purpose is to call
34 *Air Support*. If the Transmitter is destroyed,
35 then *Air Support* cannot be called for the
36 remainder of the game. It is important to
37 protect your Transmitter, and attempt to destroy
38 the Transmitter of your opponent, if the game is
39 to be won.

1 **Light Artillery**

2
3 The Light Artillery is depicted as a jeep with a
4 mounted, short range RPG. These units have the
5 longest *Mobility* range, and the largest *Fuel* and
6 *Ammo* supply of any ordnance type. On the
7 other hand, they have the lowest *Defense*, *Gun*
8 *Range* and *Gun Power*.

9
10 Light Artillery are usually the first to attack,
11 but without the support of heavier units, will
12 likely be the first to be destroyed.

13
14 Nevertheless, combined they can produce enough
15 fire power to take out any enemy unit.

16 17 **Light Armor**

18
19 Light armor is represented as a single barrel
20 light tank. They initially carry a respectable
21 quantity of *Fuel* and *Ammo*, have good *Mobility*,
22 *Gun Range* and *Power*.

23
24 Light Armor provides good backup support for
25 Light Artillery.

26
27 They are effective when used with heavier units
28 to destroy enemy units.

29 30 **Heavy Armor**

31
32 Heavy Armor is represented as a two-barrel
33 tank. These units have a high *Defense* rating,
34 *Gun Range* reaching almost anywhere on the
35 Battlefield Map display, and a very high *Gun*
36 *Power*.

37
38 They can fire on lighter enemy units, and
39 remain out of range of return enemy fire.

1 **Heavy Artillery**

2
3 Heavy Artillery should really be considered a
4 Heavy *Armored* Artillery. They are represented
5 as large gun barrels on treads.

6
7 Heavy Artillery have the highest *Defense*, *Gun*
8 *Power* and *Gun Range*, and are the strongest
9 units in the game. *Fuel*, *Ammo* and *Mobility* are
10 all low, so require constant resupply.

11
12 Its extremely long *Gun Range* can effectively be
13 used for defense along the right and left borders
14 of the Battlefield Map, where they can see and
15 fire farther (11 cells) than any approaching
16 enemy units.

17 18 **Supply Vehicle**

19
20 The Supply Vehicles are represented as trucks,
21 and are unable to fire upon the enemy. They do
22 have a huge *Fuel* and *Mobility* range, however.

23
24 They are solely used to resupply *Fuel* and *Ammo*
25 to combat units in the field.

26
27 Because of the low *Defense* of the Supply
28 vehicles, it is important they be kept out of
29 range of enemy fire.

30
31 Supply Trucks are strategically important in
32 OPERATION COM•BAT. Offensive thrusts
33 without the support of supply vehicles fizzle and
34 die, as combat units run out of *Fuel* and *Ammo*.

35
36 On the other hand, a player able to destroy his
37 opponent's supply vehicles has struck him a very
38 crippling blow.

1 Starting OPERATION COM•BAT

2
3 OPERATION COM•BAT will begin when you
4 select *New Game* under the *Play* menu. Two
5 small data files load from disk and the game
6 begins.

7
8 *Note: When playing against another computer*
9 *both computers must be set to the same*
10 *Battlefield Map before New Game is selected.*

11
12 The side (Red/White or Blue/Black) that is
13 currently chosen on the play menu always
14 begins a game. Once a game has begun, the
15 positions of all friendly units are displayed on
16 the Tactical Grid Map.

17
18 The current unit will always be marked with a
19 surrounding bracket on the Battlefield Map
20 display. And its location will blink on the
21 Tactical Grid map.

22
23 In order to select a different unit as the
24 current unit, point the mouse pointer at a unit
25 in the Battlefield Map display and click the
26 mouse button.

27
28 The Battlefield Map display then realigns itself
29 to the new piece, centering it in the display
30 when possible.

31
32 The Ordnance Status Table now displays the
33 stats for that unit, and all the Command Gadgets
34 reflect the options remaining for that unit.

35
36 Another unit, in particular those not in view in
37 the Battlefield Map display, can be chosen by
38 clicking the mouse pointer on a friendly unit
39 that is marked on the Tactical Grid Map.

1 Moving Units

2

3 The selected ordnance unit that is within the
4 boundaries of the bracket on the Battlefield Map
5 can be ordered to move by simply pointing the
6 mouse pointer to another location in the
7 Battlefield Map display and clicking the mouse
8 button.

9

10 If the location isn't impassable (occupied by
11 another ordnance unit, trees, water, rock, etc.),
12 and is within the *Mobility* range of that unit,
13 then the unit will do its best to move to the
14 selected location, avoiding any impassable
15 obstructions.

16

17 Generally, OPERATION COM•BAT analyzes the
18 move and calculates the best route to reach that
19 destination, taking into consideration the terrain
20 crossed, and the *Mobility* and remaining Fuel of
21 the unit.

22

23 However, the unit will not always reach the
24 destination, because bridges, hills or sand slow
25 the progress of the unit.

26

27 Sometimes the destination lies just outside the
28 unit's *Mobility* range.

29

30 Usually, movement orders that are within the
31 *Mobility* range of the unit are more likely to be
32 successfully carried out, than those that extend
33 to the farthest reached of the display. Pushing
34 troops beyond their limits can be counter
35 productive.

36

37 Water is always impassable. Sand, dunes, and
38 hills, are passable, but often cause delays to the
39 advancing unit.

1 Where such type terrain must be crossed, it
2 might be necessary to order a unit to move
3 beyond the destination in the hopes that it at
4 least reaches the destination coordinates.

5
6 The outcome of such moves is variable with the
7 terrain type being crossed. An astute general
8 will be able to evaluate such moves correctly
9 and make appropriate allowances.

10 11 **Firing Units**

12
13 The game default mode allows each unit to fire
14 once per turn, either before or after a move. If
15 the Double Fire option is enabled under the
16 OPTIONS Menu, then each unit may *Fire*, *Move*,
17 and then *Fire* again.

18
19 Set the Firing Direction by first selecting a
20 compass angle from one of the eight in the
21 Firing Direction Cluster. Then click on the *Fire*
22 gadget to fire the unit.

23
24 When a unit is fired, the shell continues in a
25 straight path until either it:

- 26
27 «» hits the first enemy unit encountered,
- 28 «» reaches its effective *Gun Range*,
- 29 «» hits an object (*Obstructed Mode*),
- 30 «» reaches a Battlefield Map boundary.

31
32 It is possible to hit an enemy unit just off the
33 top or bottom of the screen (1 cell row). This is
34 allowed because of the relatively narrow vertical
35 field of view.

36
37 Friendly units never receive damage from
38 friendly unit fire.

1 Units hit by incoming enemy fire sustain
2 damage until eventually destroyed.

3
4 The victor in OPERATION COM•BAT is he who
5 best uses his fire power.

6
7 Remember the defensive stats of each enemy
8 unit. Don't waste a shot of 4 power on an
9 enemy unit that could have been destroyed with
10 only a 2 power shot.

11 12 **Game Options**

13
14 The Options menu offers game options that can
15 be set before a game is begun and include the
16 following:

- 17
18 «» Choose Opponent
- 19 «» Choose an Side
- 20 «» Select a Computer Play Level
- 21 «» Select a Scenario
- 22 «» Set the Turn Timer Length
- 23 «» Select a Firing Protocol
- 24 «» Select Firings per Unit per Turn
- 25 «» Activate/Deactivate Air Support

26 27 28 **Choose Opponent**

29
30 Options include either a *Human* opponent or a
31 *Computer* Opponent, If the Computer opponent is
32 selected, then a Computer Play Level must also
33 be selected.

34 35 **Choose a Side**

36
37 The selected army color starts the game, either
38 *Blue/Black* or *Red/White*.

1 When playing teleconnected with another
2 computer, the player that starts the game by
3 selecting *New Game* receives the chosen side
4 color.

5

6 **Select Computer Level**

7

8 Three computer play levels are provided,
9 *Novice, Expert and Master.*

10

11 **Select a Scenario**

12

13 Four game scenarios, wherein the ordnance
14 placement and number of each ordnance type
15 vary, are provided. The number of each ordnance
16 type is indicated in the Scenario Table. Each
17 scenario subtly changes the strategy and tactics
18 used in a game.

19

20 When teleconnected, the scenario selected on the
21 computer that starts the game will be the
22 scenario that is played.

23

24 **Scenario #1** = 5 of each combat ordnance type
25 and 2 supply vehicles make this the most
26 challenging scenario of all to play. Supply is
27 always short. It is the longest scenario to play.

28

29 **Scenario #2** = 6 Light Armor and 9 Light
30 Artillery make this the fastest of all the game
31 scenarios to play. Two supply vehicles are not
32 too big a problem.

33

34 **Scenario #3** = 8 Light Armor and 4 Heavy
35 Armor make this a true tank war. 4 supply
36 vehicles keep the offensives on the move.

37

38 **Scenario #4** = Extra light ordnance and three
39 Supply Vehicles, a variation on other scenarios.

Turn Timer Setting

The Turn Timer forces the turn to change after a certain number of minutes has elapsed. The timer defaults to 240 seconds.

However, anything from 30 seconds to 600 seconds for a Human opponent, or 120 seconds to 600 seconds for a Computer opponent, may be selected.

The shorter the time allotted, the fewer pieces a player is able to move during the course of a turn.

Air Support usually plays a big role in games where the time is set to 120 seconds or less.

Firing Protocol

Firing Protocol sets a game to be played in either *Obstructed* or *Unobstructed* mode.

In the *Obstructed* mode all shots explode when they contact any Battlefield impediments such as trees, rocks, etc.

In *Unobstructed* mode shots move unimpeded over Battlefield map objects.

Fire/Unit/Turn

This option allows a game to be played with a *Single Fire* per unit per turn mode, or a *Double Fire* per unit per turn mode.

In *Double Fire* mode units may *Fire*, *Move*, then *Fire* again.

Air Support

Air Support may be selected as Activated or Deactivated. When Deactivated, the Transmitter is removed from the ordnance units displayed on the Battlefield Map.

Battlefield Maps

Any of the six Battlefield maps may be selected from the Options menu.

Each offers a different challenge in terrain types, and requires a different strategy to successfully master.

Rocky Canyon presents a semi-arid, mountainous landscape divided by a deep canyon which is always difficult to cross.

Jungle Ruins presents the tangle of thick jungle carved with narrow, maze-like passageways.

Desert Dunes presents an endless vista of dunes that provide no cover and make travel difficult.

River Meadow presents divided territories separated by a river, which can be crossed on a narrow bridge, or on slow access sandbars.

Marshland Bog presents a landscape of marshes, lakes, levies, and bridges.

Archipelagos presents a patchwork of small sandy islands joined by a matrix of rapid transit roadways.

1 **Playing OPERATION COM • BAT**

2
3 First select your choice of Options from the
4 menus. Then select *New Game* from the Play
5 menu. Operation COM • Bat will begin.

6
7 *Note: When playing against another computer*
8 *both computers must be set to the same*
9 *battlefield map before New Game is selected.*

10
11 At any time during a Human player's turn the
12 game can be stopped by selecting *Cede/End* from
13 the Play Menu.

14
15 A game that was Ended can be continued or
16 Replayed simply by selecting *Continue* or *Replay*
17 from the Play Menu.

18
19 Any game may be saved, then later loaded and
20 *Continued* or *Replayed*. However, *Replay* is
21 disabled whenever the game is played between
22 two computers

23
24 When the game is teleconnected to another
25 computer, every correct move made on one
26 computer is echoed on the other computer.

27
28 The receiving computer, however, does not
29 receive the opponent's Tactical Grid Map display.

30
31 Make a mental note of enemy stats on each unit
32 (call them intelligence reports) and marking the
33 weaker units as good targets.

34
35 Focus your offensive actions, allowing your units
36 to work together towards a common objective.
37 Use the borders of the map to your advantage.

1 Keep supply vehicles moving and supplying all
2 units running low on *Fuel* or *Ammo*. An
3 otherwise brilliant offensive attack can come to
4 an ignoble end, if the lead units run out of fuel
5 on a bridge or narrow passageway.

6
7 In *Unobstructed* Mode attacks may come from
8 any location. Learn to *see* possible firing angles
9 for your enemies units, as well as your own.

10
11 In *Double Fire* Mode even the weaker units are
12 powerful. Think wisely before committing to an
13 unprovoked attack.

14
15 *Air Support* can be called as long as

- 16
17 «» The Transmitter is not destroyed
18 «» Less than 5 units have moved
19 «» Less than 5 units have fired.

20
21 Air Support is very powerful weapon that will
22 quickly reduce the enemy's strength. Called too
23 frequently, though, it gives the enemy the
24 opportunity to position units in a major
25 offensive.

26
27 Relying solely on Air Support rarely wins a
28 game. However, it just might result in victory
29 for an otherwise losing player, if used
30 frequently at the end of a game.

31 32 **Saving and Loading Games**

33
34 Games may be saved, and later loaded and
35 *Continued* or *Replayed* under the Files menu.
36 Enter the filename of the game you wish to
37 save. Select previously saved games from the
38 list, using the mouse.

TELECOMMUNICATIONS

Playing Between Two Computers

The TeleComm menu provides options relating to play between two computers.

There are four possible teleconnection modes into which your computer may be set:

- «» Dial Telephone Number
- «» Answer Telephone
- «» Null Modem Connect
- «» Disconnect

The computer will always be set to one of these four Telecommunication modes. The default is *Disconnect* when the game begins.

In order for a player to initiate a teleconnection with another computer, one of the other items must be selected.

Dial Telephone Number

This menu selection tells your modem to *Dial the Telephone Number* you requested (See Modem and Opponent Parameters).

Answer Telephone

This menu selection designates this computer as the one that waits for and answers the call from the other computer when attempting to establish play between two computers. The computer instructs the modem to answer the telephone the next time it rings.

1 Null Modem Connect

2
3 This menu selection instructs OPERATION
4 COM•BAT to bypass modem communication
5 routines, and directly connect to another
6 computer via a null modem cable between the
7 serial ports of each.

8 Disconnect

10
11 This menu selection breaks the connection
12 between another computer, previously connected
13 by selecting *Dial Telephone #*, *Answer Telephone*,
14 or *Null Modem Connect*.

15
16 Both computers must always select *Disconnect*
17 when a session has ended.

18 Setting Modem and Opponent Parameters

20
21 Modem and Opponent Parameters may be set
22 from the menus.

23
24 OPERATION COM•BAT allows you to save the
25 Modem and Opponent Parameters so they can be
26 recalled instantly when needed.

27 Modem Parameters

29
30 These settings can be edited to conform to your
31 modem and saved to the disk, so that each time
32 OPERATION COM•BAT loads it defaults to the
33 requirements of your personal modem.

34
35 «» Baud Rate

36 «» Dial Command Modem Settings

37 «» Answer Command Modem Settings

Baud Rate - Modem Parameters

Baud rates of 300, 1200, 2400 and 9600 may be selected.

Both computers must be set to the same baud rate before a connection can be established.

Dial Command - Modem Parameters

Whenever your modem dials a telephone number, it must first send a signal to your modem that a telephone number is about to be sent.

If your particular modem, like most, is *AT* compatible, then either *ATDT* (for tone dialing) or *ATDP* (pulse dialing) should be chosen.

A custom command entry box is provided for any modems with non-standard modem command sets. Note that this entry box may also be used to add *AT* commands to the dial command.

For example, the command *ATX6DT* will tone dial the phone, returning result codes, which OPERATION COM•BAT can use to inform you that the number was busy, whether a human and not a computer answered the phone, or whether no one answered the phone.

If characters are displayed in the custom dial command box, then that is the active dialing command.

Click the box active, then type the command that you require.

1 **Answer Command - Modem Parameters**

2
3 A modem must be commanded to answer the
4 telephone when it rings.

5
6 If the modem has a built in auto answer feature,
7 *ATSO=1* commands it to pick up the phone after
8 it rings once.

9
10 Some older modems will answer, but must be told
11 to pick up the telephone after it rings. The
12 *ATA* gadget is used in this case.

13
14 If you have selected this answer command, you
15 would not select *Answer Telephone* menu option
16 until after the telephone rings (See Tele-
17 connection Procedures).

18
19 A custom command entry box is provided,
20 should your modem answer command differ from
21 those provided.

22
23 Click/activate the box, then type in the
24 command you require.

25 26 **Opponent Parameters**

27
28 Opponent Parameters can be entered or edited,
29 and saved to disk so they can be recalled as
30 needed.

31
32 Previously saved Opponent files are listed and
33 may be recalled by first selecting, then loading
34 them with the mouse.

35
36 Each Opponent file contains information specific
37 to establishing a connection with a particular
38 opponent, such as the *opponents name*, *telephone*
39 *number*, and the *baud rate* that will be used.

1 **Teleconnection Procedure**

2

3 Playing OPERATION COM•BAT between two
4 computers over the telephone is very easy.
5 OPERATION COM•BAT does all the work of
6 establishing and maintaining the connection, so
7 that the players can concentrate on playing the
8 game.

9

10 Before you establish a teleconnection, both of
11 the players must set the Opponent Parameters,
12 or LOAD a previously saved Opponent Parameters
13 file from the disk.

14

15 **Voice Contact**

16

17 It is recommended that telephone voice contact
18 be first established between the OPERATION
19 COM•BAT players to decide who will *Dial the*
20 *Telephone Number* and who will *Answer the*
21 *Telephone*.

22

23 It is also necessary to agree upon the baud rate
24 that will be used for the connection, which
25 should be highest common to both the modems
26 that are being used.

27

28 After they each hang up the voice call, the
29 player who will answer the call should select
30 *Answer Telephone* from the menu (if *ATS0=1*.
31 The Dialing computer waits 30 seconds to be
32 sure his opponent is ready, then selects *Dial*
33 *Telephone Number* from the menu.

34

35 If *ATA* is the Answer mode, The Player who is
36 dialing should *Dial the Telephone Number* first.
37 The other player then selects *Answer Telephone*
38 from the menu after his phone rings.

39

1 Teleconnection Procedure Summary

- 2
- 3 1. Each computer must load OPERATION
- 4 COM•BAT.
- 5
- 6 2. Set Modem Parameters, if not set.
- 7
- 8 3. Load or set Opponent Parameters.
- 9
- 10 4. Call your opponent (*voice*) to decide who
- 11 will call whom.
- 12
- 13 5. Both computers should be on the same map,
- 14 and not have a game started.
- 15
- 16 6. Before hanging up the phone, players
- 17 agree that a call will be placed in 15
- 18 seconds.
- 19
- 20 7. If *ATS0=1* is the designated answer
- 21 command, the player who answers the phone
- 22 selects *Answer Telephone*. Then 15 seconds
- 23 later the other player selects *Dial Telephone*
- 24 *Number*.
- 25
- 26 8. If *ATA* is the designated answer command,
- 27 one player selects *Dial the Telephone*
- 28 *Number*. Then the other player selects
- 29 *Answer Telephone* when he hears the
- 30 telephone ring.
- 31
- 32 9. OPERATION COM•BAT will establish the
- 33 connection between the computers.
- 34
- 35 10. Players may now type messages to each
- 36 other. When they are ready, they may select
- 37 *New Game*, or load and *Continue* a saved
- 38 game that was previously saved.
- 39

1 Teleconnection - Another Method

2
3 A few older, non-standard modems do not
4 answer the phone or recognize the *AT* command
5 set, and may not initially seem to work with
6 OPERATION COM•BAT.

7
8 You may be still able to play by using the *Null*
9 *Modem Connect* option. The connect procedure
10 that follows should be used to establish a
11 teleconnection under these circumstances.

12
13 The computers must each load and use
14 telecommunication software that works with the
15 respective modems.

16
17 The software should be set to the following
18 parameters.

19
20 Baud Rate = your baud rate
21 Parity = NONE
22 Data Length = 8 bits
23 Stop Bits = 1 stop bit
24 Duplex = Full Duplex

25
26 After making a teleconnection between the two
27 computers, quit the telecommunication programs.
28 The telephone connection should remain open
29 between the two modems.

30
31 Load OPERATION COM•BAT on both computers.
32 After it has loaded, the players should select the
33 *Null Modem Connect* menu option.

34
35 Wait a sufficient time for both computers to get
36 the game loaded and set, then try typing
37 messages to each other in order to determine if
38 a connection was successfully established.

1 TROUBLE SHOOTING

2 3 4 The game will not Load

- 5
- 6 1. Have you sufficient free memory for the
7 game to load?
 - 8
9 2. Verify that your working copy of the game
10 disk is not damaged.

11 12 13 The game will not Dial a Telephone

- 14
- 15 1. Is your modem connected to your computer
16 and powered? Check the connections
17 between computer and modem.
 - 18
19 2. Are *Modem and Opponent Parameters* set
20 correctly? If not, set the parameters
21 correctly.
 - 22
23 3. Is your modem compatible with the *AT*
24 command set? If not, consult your modem
25 manual for a dial command that might work,
26 and type it into the Dial Command Box.
 - 27
28 5. If all else fails, try the procedure outlined
29 under *TeleConnection - Another Method*.

30 31 32 The game will not Answer the Phone

- 33
- 34 1. Is your modem connected to your computer
35 and powered? Check the connections between
36 computer and modem.
 - 37
38 2. Are your *Modem Parameters* set correctly?
39 If not, set the parameters correctly.

3. Is your modem compatible with the *AT* command set? If not, consult your modem manual for an answer command that might work, and type it in the Answer Command Box.
4. Try the *ATA* command to force the modems to answer the phone.
5. If all else fails, try the procedure outlined under *TeleConnection - Another Method*.

TeleConnected, but Game will not Work

1. Is the same baud rate set on both computers?
2. Had a game already been **STARTED** on one of the computers? Games should not be started when the teleconnection is first established.
3. Are both computers set to the same Map? Both computers should select the same map before starting a game.
4. Do you have *Call Waiting*? Disable *Call Waiting* and try again.
4. Try hanging up and re-establish phone (voice) contact to verify all modem settings on each computer. Then try again.

Connected & Playing, then No Response

1. Are you still connected? Check for the Carrier Detect (CD) light on your modem, if it has one.
2. Type in a message. The chime may awaken your sleeping opponent.
3. If the *SEND* message line echoes back to the *RECV* message line (with some modems), then you are disconnected.
4. If you have been disconnected, first *Save* the game. Then repeat the connect procedure to reestablish a connection. Then Load the saved game and select *Continue*. Game play will be picked up where you left off.

Note: If the menus are deactivated when the connection is broken you can click on the Message bar with the mouse to reactivate them.

5. If you have *Call Waiting*, it can cause a disruption of telephone game play.

Call Waiting should be disabled before attempting to play any game over the telephone.

If you do not know how to disable *Call Waiting*, please consult your telephone company.



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