SPOILS OF WAR

1.0   LOADING

See sections 2.5 or 3.1 which refer to playing the game from floppy disks or hard drive installation. PC users should refer to reference card for any anomolies to this manual.

2.0   INTRODUCTION

2.1 IS GENERAL

Before starting the game please make back ups of all the original disks. Play the game from back ups only with the disks write protected, as the game will periodically save information to the disks. Also ensure that you have already created a save game disk. When using a hard drive please note the instructions for hard disks.

SPOILS OF WAR is a game of discovery, conquest and colonization of foreign lands on far away continents. The player functions as commander of several explorers who act on the players behalf to carry out certain orders. The objective of the simulation is to become the first player to control a large part of the newly discovered continent and thus become vice King.

2.2 ENTERING THE DATE

Before starting the game, you have to enter ' today's ' date, (enter MM - DD - YY). The current date will be taken from the system automatically. The purpose of this procedure is to give a better overview during disk operations. When saving a game, the date is also saved. This allows you to easily determine the latest save.

Enter the day first, followed by the month and the year.

By pressing (Return) the date entry is skipped and the last date you typed in is kept.

2.3 USING THE KEYBOARD

You may play the game using ' keyboard ' only. Generally   each option can be chosen using the corresponding function keys or letter keys (hotkeys)

A complete list is given below.

F1   Action
F2   Colony
F3   Military
F4 - Report
F5 - Profit
F6 - Manoeuvre
F7 - Buy
F8 - End

All the above are displayed on screen when appropriate.

(Esc.) is always interpreted as escape and may be used to cancel incorrect inputs.

The cursor can be moved by using the keys around the (S) or by using the number block. For special functions please use the following keys :

+ : plus 1 or next Explorer.
- : minus 1 or previous Explorer.
(arrow left) : plus 1 or next Explorer.
(arrow right) : minus 1 or previous Explorer.
(arrow up) : plus 10 or plus 50.
(arrow down) : minus 10 or minus 50.
(shift) (arrow up) : maximum.
(shift) (arrow down) : minimum.
(space) : even.
(Return) : confirm input.
(Esc.) : leave phase or cancel order.

Please note that these keys are active only at certain points in the game. In general then the keys around the (S) or the (5) are used to scroll around the map. To perform an action on any highlighted square then press (S) or (5). "Or use the mouse."

In certain cases you will have to choose an explorer in the capital or will have to choose quantities. You can scroll through the explorers by using the (+) or (-) keys. In order to select an explorer then press (Return). If you wish to allocate troops, supplies or gold use (+) or (-) keys and confirm the amount with the (Return) key.

2.4 SAVING THE GAME

When starting the game from hard disk, the saved games will automatically be saved in the ' Spoils ' directory.

When using disk drives for saving games, proceed as follows: Insert your workbench disk into DFO: and switch on your Amiga. When the workbench

screen appears, insert the ' main ' disk into any drive and double click on the ' main ' disk icon. An icon called ' make-save-disk ' will appear. Double click on this icon and follow on screen instructions to create a ' save game ' disk.

2.5 HARD DISK INSTALLATION

Switch off your computer. Insert your ' workbench ' disk into DFO: and switch on your Amiga. When the workbench screen appears, insert the ' main ' disk into any drive. Double click on the disk icon of the main disk. A window with an icon named ' HD - install ' appears. Double click on this icon with the left mouse button. The hard disk installation will begin. Please enter the name of the hard disk onto which the game is to be installed. By clicking on the circle symbol, all drives will be displayed sequentially. After selecting a drive, click on the ' start ' icon. The programme will now be installed in the main directory of the hard disk under the directory ' spoils ".
If you prefer to install ' Spoils of War ' in the CLI-mode on your hard disk, please proceed as follows: Activate the shell mode. Create a directory for the game, with any name. Copy all files and sub-directories of both disks into this directory. Starting the game is possible from this directory using "Execute Start ".

2.6 USING A MOUSE

Of course you may wish to use a mouse for all inputs except for entering names. Options are chosen by clicking the left mouse button. The right mouse button serves as an escape function; exception : by clicking the right mouse button in the main menu during the governor, admiral or general phase you are taken directly to the movement menu.
All squares and symbols around an Explorer can be clicked on as can all orders. For battles, special rules apply. Orders are visible in the menu window. Furthermore, the selection bar (lower right edge of the screen) can be accessed in order to enter numbers and choose Explorers within some menus. The icons stand for :

Esc. :   end phase or cancel order.
           arrow down : minimum
           double arrow left : -10 or -50
           arrow left : -1
           arrow left right : even

arrow right : +1
double arrow right : +10 or +50
arrow up : maximum
OK : input correct

If you wish to access an Explorer on the map, please position the mouse pointer on the corresponding symbol. Usually, only those Explorers who are directly adjacent or under the current Explorer can be accessed.

3.0 BEGINNING THE GAME

3.1 STARTING THE GAME FROM FLOPPY DISK.

Insert the ' main ' disk into DFO: and - if you have another drive insert the ' game " disk into it. The game will now load automatically. If you are only using one drive you will be prompted to change disks.

The intro and the title page can be terminated by clicking the mouse. After this the main programme is loaded. Once the game has loaded the computer will take approximately 1 minute to decompress the data and set up the game. During play the computer will require some ' thinking ' time when deciding it's next move. Please be patient.
After having chosen the date a menu appears on screen giving the following options :

        1 —— View Hall of Fame.
        2 —— Load saved game.
        3 —— Load scenario.
        4 —— Begin new game.

By selecting the appropriate function key you can select the menu options described in more detail below.

3.2 EXAMINING THE HALL OF FAME

The most successful Explorers, who have been appointed vice king of the new world will be saved here. The list is displayed in order of rank and victory points obtained. The rating is calculated as follows : number of victory points / number of game turns. If a player reaches 3000 victory points and needs 60 turns in order to achieve this, his rating will be 50.

3.3 ERASE HALL OF FAME

In order to erase a Hall of fame, select this option and insert your save game disk. The computer will now erase your old Hall of Fame and will install a new one.

3.4 LOADISG A SAVED GAME

When ' load save ' game is selected, a list of save games will be displayed. Make your choice and the game will load automatically.

3.5 LOADING A SCENARIO

A scenario disk together with a terrain editor will be made available. Follow on screen instructions to load this option.

4.0 CONDITIONS OF PLAY

When a new game is started a creation menu appears. This menu allows the player to set up the game and consists of six parts. The player can select number of players, difficulty levels, whether Cayas are active or not etc. Two to four players can be activated. They can be set as (H) -human, (C) - computer controlled or (N) - not activated.
Each human player can name his commander (maximum length 10 letters), whilst the computer players will select their own names.
There are 10 difficulty levels available, with 0 being the easiest and 9 being the most difficult. Here there is a difference between human players and computer players. Depending upon the level, each player will receive a certain amount of capital to start with as well as subsidies at the end of the strategic phase directly from the King.
At level 0 human players receive 2000 gold units as a starting capital and 100 gold units at the end of each strategy phase. With each higher level the amount of gold decreases by 100 / 10 respectively. At level 9, for example, the player will receive 1100 gold units to start with and 10 gold units per turn. For the computer opponents it works just the other way 'round. Level 0 has the same effects as with human players but each increase in the difficulty level increases the gold started with and the subsidy by 100 / 10 respectively. At level 9, for example, the computer opponent receives 2900 gold units to start with and an additional 190 gold units per turn. Furthermore, the cost of hiring a new Explorer decreases by 5% per level. Because of these different level choices, a total of 19 difficulty levels is possible.
Once your selections have been made select ' O.K ' to begin the game.

5.0 TERMS AND INTERFACE

5.1 THE SCREEN AND TEXT MESSAGES

The screen consists of 8 parts.

> A - Number of player and name.
> B - Terrain information.
> C - Year and season.
> D - Map window and picture window.
> E - Information window.
> F - Menu.
> G - Phase display.
> H - Icons.

In the window (A) the current player and his name is listed.
In window (B) you see the information regarding the terrain of the current square on which the cursor is currently positioned. Right of the position coordinates the terrain symbol is shown. The profit line informs you whether and how much income can be earned from this colony as tax. possible numbers range from 3 to 98. This is the number of gold units available per quarter of a year (season 0. Normally, this value is white. Red numbers indicate, that during the current quarter of the year tax has already been collected from this colony.
Window (C) shows the current year and season. Each season is referred to as as one game turn. As 4 seasons (spring, summer, autumn and winter) exist, one year consists of 4 game turns. Each season has a specific impact on movement, battle, strength and supply of the military units. Further details on this aspect can be found in later chapters.
Window (D) displays a part of the map 9 X 9 squares in area. The whole map consists of an area 64 X 64. The cursor always occupies the centre of the map window. For movements the map can be scrolled under the cursor.
Window (E) contains various information.
Window (F) contains the menu. Here all available options are listed.
Window (G) details the current phase being played.
Window (H) Contains all the icons for control of the game.

All text messages throughout the game refer to the active player. If a computer opponent should begin a naval battle for example (he attacks you) and win, the victory message will appear despite the fact

that you - as the human player - lost the battle.

5.2 THE EXPLORERS

The Explorers are the persons who act for the players. They are hired during the strategy phase. Each player gives his Explorers orders which are then carried out by them. Explorers discover, conquer and colonize on behalf of the player. Without Explorers the player can perform no actions. Therefore the Explorers are the most important personas in the game. As Commander-in chief the player can have various explorers under his command. Up to 600 Explorers (of all 4 players) can be in the game at the same time. There are 4 different kinds of Explorer: Governors, Admirals, Generals and Commanders. Commanders must be based in a city or harbour, they protect important positions and have half the movement points (15) and half the command points (16) of other Explorers. They cannot attack or move. Usually, only one Explorer may be placed in an explored square. However if a Commander is in a settlement or harbour this location can still be entered by Generals or Governors. Commanders are treated like Generals, i.e they consume the same number of order or movement points for a certain order. If a Commander is present in a settlement or harbour, the settlement or harbour will be marked in the colour of the owning player. This is visible only to the owner of the Commander. The colour disappears, when another player is active.

When viewing the Explorers data on screen, the type of Explorer is given first. Each Explorer is numbered; to the right of this number may be a letter ' T ' " T " means that the Explorer either transports another Explorer (only possible for Admirals) or is himself transported by another Explorer (only possible for Governors or Generals). ' N ' stands for normal, i.e the Explorer is not transported and transports no other Explorer. Under this line you see age as well as the number of gold units and supplies the Explorer owns. From the age of 60, Explorers will try to retire. That means, the chance that the Explorer will retire increases each year. In the next line you see this explorers values for:

- Command points (CP)
- Administration (A) and
- Loyalty (L)

Command points (max. 32) are used for carrying out orders. For each order which the Explorer carries out, he consumes a certain number of command points. These command points represent the time the Explorer needs in order to plan and carry out the order. For example, an Explorer uses up more command points for carrying out an attack than for conducting a normal movement.

Administration (max. value 200) mirrors the Explorers experience. This value may never decrease. The higher this number, the more command points the Explorer receives each turn.

Loyalty (max. value 100%) refers to the Explorers attitude towards the player. If this value drops below 50% the Explorer may desert.

Directly under this line you will find the values for:

- Movement points (MP)
- Experience (E)
- Morale (M)

Each Explorer usually leads some military units, such as infantry or depots. These values refer to these units.

Morale (max 100%) serves the same function as loyalty in the case of an Explorer. If morale falls below 50% it will become possible for a mutiny to occur and for the Explorer to be killed by his own troops.

Experience (max. 200) is the average battle experience of all units under the command of this Explorer. A high experience factor gives advantages during combat. Experience decreases if new troops are hired but can be raised again by training.

Movement points (max. 30) are used up when the Explorer carries out certain actions. Each turn, each Explorer receives 30 movement points. Depending on the order, a certain amount is used up when each order is carried out.

Finally the number of troops under the command of the Explorer is shown.

INF = infantry	FLEET = ships
CAV = cavalry	DEPOTS
ART = artillery	TRANS = transports
ENG = engineers	COLON = colonists
MAR = marines	

More details on this is given in the following chapter.

Different types of Explorer are specialist in certain areas. For example, Governors are not suited for land battles. This is a task for an experienced general, whilst Admirals are best used for sea battles and for transporting gold and Explorers. Governors should concentrate on colonial policy. Colonization, collecting tax, building settlements and harbours are typical tasks for a Governor. In contrast Generals discover new lands, protect colonies and conquer enemy areas.

It is important therefore to choose the correct Explorers for particular activities. Governors and Generals can generally perform the same functions, but consume differing amounts of command and movement points. An Explorer who has no command or movement points left can perform no further actions during the current game turn. At the beginning of each strategy phase new command and movement points are received. During the action phase each player should keep a special note of how much he uses his Explorers.

5.3 THE UNITS

INFANTRY - Both light and heavy infantry are available in the game. Inexpensive to recruit with good defence strength they are necessary for tactical battles. Furthermore, light infantry can be used to board enemy ships during sea battles.

CAVALRY - Fast and therefore very well suited for attacks. If an enemy unit is destroyed, cavalry are the only unit type that may advance 2 squares. Relatively   expensive.

ARTILLERY   Excellent when attacking, with it's supporting fire bringing chaos to the enemy. This advantage is somewhat counteracted by it's low movement allowance and high purchase cost.

ENGINEERS - Necessary for colonization, building settlements and harbours, boarding ships and building bridges during tactical land battles. A general who begins a campaign without engineers has no chance of success.

FLEETS - Each ship can transport any unit. For transport from the capital to the colonies there are always too few ships available. Owning a well equipped armada brings control of the oceans, leading to eventual victory.

DEPOTS   Here the supplies of the Explorer are stored. Each Depot may contain 3000 supply units. Depots are vital. Each Explorer will need at least 50 supply units per turn, merely to meet basic demand. Without supplies troops will soon defect.

TRANSPORTS - These   hold the gold reserves of the Explorer. It is not possible to transport gold without them. Each transport can be loaded with

up to 3000 gold units. There is one exception to this rule: As long as an Explorer owns no transport, he will be allowed to buy one transport in the capital. An Admiral, if he has no transport may recruit rather than buy one in the capital provided he has sufficient gold.

COLONISTS - They are necessary in order to build up new colonies, build new settlements and harbours or to enlarge existing installations. They pay taxes which will be needed to finance your plans.

MARINES - Can only be hired by Admirals and are very well suited for boarding enemy ships.

5.4 TERRAIN TYPES

On the strategic map 22 terrain types can be found.

TERRAIN TYPE	MOVEMENT POINTS	SUPPLY UNITS
Unknown	2	2
Sea (Admirals)	2	2
Swamp	16	8
Mountain	12	6
Hill	8	4
Forest	6	2
Plains	4	2
Coast	4	2
Colonized mountain	4	2
Colonized hill	4	2
Colonized forest	2	2
Colonized plains	2	2
Harbour	2	2
Settlement	2	2
Capital	2	2
Border	-	
Desert	6	12
Lake		
High mountain	14	8
Mine	4	4
Exhausted mine	4	4
Cayas village	2	2

As can be seen from the table above, depending on the terrain type a certain number of movement points and supply units are consumed when entering a square. Harbours and settlements are interpreted as colonies.
During the land battle phase 19 terrain types are possible on the tactical map.

TERRAIN TYPE	MOVEMENT POINTS	SUPPLY UNITS
Lake		
River	(4)	1 2
Bridge	2	2
Road	2	2
Settlement	2	2
Fortress	2	2
Colonized plains	2	2
Plains	4	2
Colonized forest	4	4
Forest	6	4
Colonized hill	6	6
Hill	8	6
Colonized mountain	8	8
Mountain	1 0	8
Swamp	1 2	16
High mountain		
Desert	1 0	2 0
Mine	8	8
Cayas village	2	2

In the appendix you will find descriptions of the specialties of these terrain types. Only engineers can enter river squares. No unit may enter lake or high mountain terrain.

5.5 SEQUENCE OF PLAY
Each game turn consists of 2 phases : Strategy phase and Action phase. The Action phase is divided into another 4 sub phases : Governor, Admiral, General and Commander.
During the strategy phase the players plot their strategies, i.e decisions are made about how many colonists and Explorers will be hired or whether gold will be loaned to another player.

During the Action phase, players send orders concerning their tactical decisions to their Explorers. For each explorer a special sub phase exists, played in the order Governors, Admirals, Generals and finally Commanders. Each of these sub phases is further divided into pulses.
Orders are given beginning with the explorer who has the lowest number. This Explorer can now execute one order. Each Explorer in order will take his turn eventually returning to the original Explorer who will then make his next order and so on. As movement points and command points are expended for each order carried out some Explorers will gradually become inactive and will have to end their turn. Once the number of movement or command points reaches 0 then the Explorer will be inactive.

6.0 THE STRATEGY PHASE

6.1 TERMINATING THE GAME
From the 5th year on (= 20 turns) you can terminate the game and have the computer determine the winner. The best player may then be listed in the Hall of Fame. This option is designed for use when your fellow players have insufficient time to play through the whole number of game turns. If the two best players have the same number of victory points, this option cannot be activated. This is also true for other victory conditions.

6.2 RANDOM EVENTS
At the beginning of the strategy phase, random events may happen, resulting in advantages or disadvantages to the players. These events will not be explained here as they are quite extensive and we wish to retain the element of surprise.

6.3 GIFTS
With this option you may help another player by transferring gold.

6.4 HIRE EXPLORERS
First choose the type of Explorer you would like to hire. After this the hiring cost must be entered. Costs range from 25 to 100 gold units. Note Governors and Commanders cost at least 25, Generals at least 50 and Admirals at least 75 gold units. The more you pay the better the abilities of your new Explorer. Age is also very influential, experienced Explorers have usually been serving in the Kings army for at least 10 years. New Explorers are hired in the capital and already own 1 depot and 1 transport. Admirals

furthermore receive two ships.

6. 5 HIRE COLONISTS

All Explorers except Commanders may hire colonists during the strategy phase. Colonization cannot take place without colonists. Select an Explorer who is in the capital. The cost of colonists will increase during the game. At the start of the game colonists cost 1 gold unit. From the year 1802 onwards prices begin to rise. Please bear in mind that income can only be generated via taxes and that colonists are the only tax payers.

6. 6 SUBSIDIES FOR THE PLAYERS

At the end of each strategy phase the players receive subsidies. The amount depends on the difficulty level for each player, as chosen at the start of the game. A player will not receive any subsidy if he stores more than **5000** gold units in his capital.

6. 7 VICTORY DETERMINATION AND ENDING THE GAME

The computer will end the game if one of the following conditions are met :
  The game year 2000 is reached.
- A player achieves 50000 victory points.
- A player achieves twice as many victory points as all other players
 together.

The best player is then appointed as viceroy and hopefully enters the Hall of Fame.

6.8 RESEARCH

Players may research in 4 categories :

> A) Ship construction
> B) Tactics
> C) Weapon technics
> D) Economy

Research can be carried out only once per turn per category. Enter the category and the number of gold units you wish to spend. The computer will decide the result of your expenditure. Categories in which research has already been carried out are marked. The more you spend the faster results may be achieved. A maximum of 100 gold units per turn per category may be spent. The development level is expressed as a value between 0 and 99. With an increase in economy taxes will increase. Good values in weapon technics and tactics will result in improved performance in battle, whilst ship construction improves a ships mobility during sea battles.

7. 0 THE ACTION PHASE

7. 1 GENERAL INFORMATION

During the Action phase the Explorers can receive many orders. These options are built into a series of menus in order to ease the input. All orders may be chosen with the function keys / mouse and will be explained in more detail in the next chapters.

The action phase consists of the Governor, Admiral, General and Commander sub phases. All orders are generally the same for all Explorers, with some exceptions. If certain orders cannot be carried out, the computer will only give an error message, when not enough gold units, supply units, command points or movement points are available.

On all other cases the computer will ignore your incorrect input without comments. At the beginning of each explanation you will see the costs involved for carrying out the order. For a summary see the appendix which provides a more detailed overview. A " ? " indicates that the costs depend on the terrain type. Please make sure that all Explorers always carry enough supply units with them. By pressing the " Help " key on the Amiga or the "End" key on the PC in the main menu, a summary of all screen symbols will appear. By clicking the mouse or any key you will be returned to the main menu.

7.2 THE ACTION MENU

7.2.1 SUB MENU   MOVEMENT
Command points Governor/Admiral/ General : l/l/l
Movement points : ?
Gold units : -
Supply units : ?

With this order you can move an Explorer in any of 8 directions over the map. While Generals and Governors can move only one square at a time, Admirals can move a number of squares during each turn dependant upon the season. During autumn, there are usually favourable winds. During

summer, it is usually calm whilst during other seasons the weather may be moderate. If an Explorer moves diagonally he will consume 50% more movement / supply points. Squares which are already occupied by other Explorers cannot be entered except if it is a friendly capital.

Unexplored squares are explored by moving an Explorer onto them. The true terrain type then becomes visible. When discovering new squares only movement points are consumed. The map only displays areas which were explored by the current player. Enemy terrain is only shown if a friendly Explorer has passed through before. The Explorer does not actually move at this point so it is possible to explore several squares before deciding which adjacent square to move onto. For each explored square 1 victory point is earned. The terrain of a newly discovered square is determined by the computer. Coast can only be discovered from adjacent sea squares. Swamp only occurs seldomly, whilst forest is the most often terrain encountered. Admirals can only enter water squares and the friendly capital. If an Admiral transports another Explorer you may examine the latters data by pressing (S) or (5) in this menu. Press any key to return to the movement menu. During the Governor and General sub phase you can examine the profit values of the visible part of the map. press (S) or (5) to do so. This information can also be viewed by selecting the active explorer with the mouse.

If an Explorer does not have sufficient supply units, movement points or command points to conduct a certain movement, a special rule comes into effect. A movement without supply units decreases loyalty and morale by 5%. If insufficient command points or movement points are available, the difference to the value 0 will be deducted from loyalty and morale. The same is true of an order to attack. This special rule is not in effect for all other orders.

Example: A General still has 6 command points and 4 movement points. He attacks an enemy general who is occupying a mountain square. As the attack is carried out diagonally, it would normally cost 18 movement points. As the general only has 4 movement points remaining, the morale of his troops will be reduced by 14%. An attack requires 8 command points. He lacks 2 points, so 2 points will be deducted from his loyalty rating.

7.2.2 SUB MENU -ATTACK
Command points Governor / Admiral / General : 16 / 8 / 8
Movement points : ?

Gold units : -
Supply units : ?

Adjacent enemy Explorers can be attacked with this order. The programme will then load the battle routines. Of course Admirals can only attack other Admirals, but no Governor or General, and vice versa. Please note that sea and land battles consume many supply units. Battles are described in greater detail in later chapters.

7.2.3 SUB MENU - TRANSPORT
This menu consists of 4 further sub menus :

7.2.3.1 EMBARK EXPLORER
Command points Governor / Admiral / General : - / 1 / -
Movement points : - / 1 / -
Gold units : -
Supply units : -

Only an Admiral can carry out this order. The player has to choose the direction from which the Admiral shall pick up a Governor or General. An Explorer can only be picked up if he is in a harbour or in the capital. Admirals cannot transport other Admirals and only one Explorer may be transported at a time.

7.2.3.2 DISEMBARK EXPLORER.
Command points Governor / Admiral / General : - / 1 / -
Movement points : - / 1 / -
Gold units : -
Supply units : -

Only an Admiral can carry out this order. The player has to choose the direction, into which the Admiral shall disembark the Governor or General. An Explorer can only disembark into a harbour or into the capital, or on to a coast square.

7.2.3.3 LOAD GOLD UNITS
Command points Governor / Admiral / General : 1 / 1 / 1
Movement points : 1 / 1 / 1
Gold unit : -

Supply units: : -

Gold units can only be loaded in a capital. This order has the purpose of supplying Explorers with financing so that they can buy new supply units or hire more troops. For each 10 gold units loaded in the capital however, 1 victory point is deducted.

7.2.3.4 UNLOAD GOLD UNITS
Command points Governor / Admiral / General : 1 / 1 / 1
Movement points : 1/ 1/ 1
Gold units : -
Supply units : -

Gold units may only be unloaded in the capital. For every 10 gold units unloaded in the capital, 1 victory point is gained. Therefore this action is important to winning the game. Each player may hold up to 10,000 gold units in his capital. Each gold unit over this amount is given to the King and earns victory points.

7.2.4 SUB MENU - PLUNDER
Command points Governor / Admiral / General : 4 / - / 2
Movement points : ?
Gold units : -
Supply units : ?

By plundering a colony, twice the normal tax income can be gained. However, the profit value of the colony decreases after this action. Plundered cities are wiped out and become normal plains again. He who plunders his own colonies gives up tax income which would have been earned during the following turns. Plundering a colony consumes twice as many movement and supply points as moving into a colony normally. Plunder is not possible by Admirals or commanders. To destroy Cayas settlements, they must be plundered.

7.3 THE COLONY MENU

7.3.1 SUB MENU - COLONIZATION
Command points Governor / Admiral / General : 1 /   / 2
Movement points : ?

Gold units : 10 per colonist involved.
Supply units : 100 per colonist involved.

Only plains, forest, hill and mountain can be colonized. Colonized plains are shown as a field, the forest symbol is replaced by "Small Huts" (Amiga) or "White Flags" (PC), hills and mountains are distinguished by colour. For colonization the players have to determine the number of colonists involved. A certain % will not survive the colonization trial. The more colonists that survive, the higher the tax income per season will be. It is possible for all colonists to perish. Engineers help with the colonization as does a high administration value for the Explorer. The square currently occupied by the Explorer becomes the colony. A square can never be colonized twice.

The income derived from any colony is determined by two factors: base value and profit value. The base value for plains is 3, for forest 6, for hill 9 and for mountain 12. This base value can increase as result of a high administration value. The number of surviving colonists determines the profit value. The highest possible profit value is 7.

Example : A Governor with a high administration value attempts to colonize a mountain area with 8 colonists. The base value is partially by random as 14. One colonist dies from an unknown disease. Therefore tax income amounts to : 14 X 7 = 98 gold units. This is already the maximum possible value. The profit factor is also the value by which the players' victory points increase.

7.3.2 SUB MENU - INVESTMENT
This menu consists of four further sub menus.

7.3.2.1 BUILD HARBOUR
Command points Governor / Admiral / General : 1 / - / 2
Movement points : 6 / - / 9
Gold units : 30
Supply units : 1,000

Harbours can only be built on coastal locations. They earn taxes of 10 gold units per season. At least 1 engineer and 1 colonist are required to build a harbour. Admirals cannot enter harbour squares but may use them for short time periods to load and unload persons / goods. The rest of their time is spent on patrols at sea. In harbours Generals and Governors can supply

themselves with supply units. Building a harbour earns 10 victory points.

7.3.2.2 BUILD SETTLEMENT
Command points Governor / Admiral / General : 2 / - / 4
Movement points : 8 / - / 12
Gold unit : 60
Supply units : 2,000

Settlements can only be built on uncolonized plains. They earn taxes at the rate of 15 gold units per season. 1 engineer and at least 2 colonists are needed to build a settlement. In settlements, Generals and Governors can hire new troops (no colonists) and buy supply units. Building a settlement earns 20 victory points.

7.3.2.3 EXPAND SETTLEMENT
Command points Governor / Admiral / General : 1 / - / 2
Movement points : 4 / - / 6
Gold units : 40
Supply units : 1,500

Settlements are the only colonies that can be expanded. Each enlargement increases the tax income by 15 gold units per season. Expanding a settlement requires at least 1 engineer and 1 colonist. Settlements can be expanded up to 5 times. Expanding a settlement earns 15 victory points.

7.3.2.4 BUILD MINE
Command points Governor / Admiral / General : 4 / - / 8
Movement points : 12 / - / 18
Gold units : 100
Supply units : 4,000
Mines can be built in high mountain terrain. At least 2 engineers and 3 colonists are required. If mining is successful, the terrain symbol for high mountain will be replaced by a mine symbol (2 carts loaded with gold). Profit is displayed under terrain information as two question marks (??). Tax collected is determined at random. In any case it will be at least 100 gold units. After some time the mine may become exhausted. The terrain symbol will then be replaced by two empty carts. This symbol is also used to show that mining operations were unsuccessful.

7.3.3 TRADE
Command points Governor / Admiral / General : 1 / 1 / 1
Movement points : 1 / 1 / 1
Gold units : -
Supply units : -

With this order, Explorers can buy or sell supply units in harbours, settlements or in the capital. For 1 gold unit 100 supply points can be purchased. When selling supply units, 1 gold unit is received for 200 supply units. The number of supply units is entered via the number keys or mouse. Each depot can only transport 3,000 supply units.

7.3.4 PROFIT
Command points Governor / Admiral / General : 1 / - / 2
Movement points : 1 / - / 2
Gold units : -
Supply units : ?

With this order taxes are collected. The profit value on the screen is highlighted in red when taxes have been collected. During the next turn, the same amount becomes available. Taxes are usually paid in the form of tradable goods produced by the colonists. These goods have a gold worth which is added to the Explorers' gold reserves.

7.4 THE MILITARY MENU

7.4.1 SUB MENU - RECRUITMENT
Command points Governor / Admiral / General : 6 / 4 / 4
Movement points : 1 / 1 / 1
Gold units : ?
Supply units : -

With this order an Explorer can increase his troops up to a maximum value of 15 land units, colonists count as land units. Each Explorer can only hire those troops whom he can also lead in battle. The exceptions being colonists. Therefore an Admiral cannot hire heavy infantry, cavalry or artillery whilst other Explorers cannot recruit ships or marines. An Admiral can only buy up to 8 ships and load them with land troops, but by boarding and capturing enemy vessels an Admiral can increase the size of his fleet to

15 ships. By hiring, inexperienced troops the Explorers experience value decreases accordingly. For example, doubling the number of troops could halve the experience. Recruitment is only possible in settlements or in the capital.

7.4.2 SUB MENU - REORGANIZATION
Command points Governor / Admiral / General : 1/ 1 / 1
Movement points : 1 / 1 / 1
Gold units : -
Supply units : -

This option is helpful if two Explorers wish to exchange gold,supply or military units. Admirals can only exchange with other Explorers if they are in a harbour or the capital or if they are loaded or are Admirals themselves. These transfers also change the experience values of the Explorers involved, just as with recruitment. However, colonists are exempted from this rule. When reorganizing the data for both explorers is displayed in the upper information window. The lower text window shows the numbers of goods or troops to be exchanged. The current Explorer is shown with his ID number. The next line shows the number of units present, followed by the amount the current Explorer is to receive. The number which remains for the second Explorer to receive is shown in the following line. If transports or depots are exchanged, gold and supply units are automatically transferred, if one of the Explorers should not have sufficient transport capacity. If only gold or supply units are exchanged, transports or depots are not exchanged.

7.4.3 SUB MENU - GIFTS
Command points Governor / Admiral / General : 1 / 1 / 1
Movement points : 1/ 1 / 1
Gold unit: 5 for Explorer, 1 per military unit.
Supply units : -

If the loyalty or morale of an Explorer falls below 50, danger of the Explorers desertion or a mutiny of his troops becomes imminent. In order to avoid this, you can give gold to the Explorer or to his units. By this, the two values are increased again. It requires 5 gold units to raise an Explorers loyalty by 1 point. Troops will require 1 gold unit for each military unit present. The gold is taken from the Explorers stock.

7.4.4 SUB MENU - TRAINING
Command points Governor / Admiral / General : 6 / 4 / 4
Movement points : 10 / 5 / 5
Gold units : -
Supply units : 50 per unit (except colonists)

Through training, the experience level increases by 4 points, morale by 2 points and administration by 1 point.

7.5 THE REPORT MENU
The options here require no expenditure of command or movement points. They can be chosen at any time.

7.5.1 SUB MENU GAME SCORE
In the information window, the players name, their victory points and gold reserves stocked in the capital are shown, together with the kind of player - computer, human or none. The supply units still held by Explorers are not included. The gold units can be freely used by the Explorers for their plans. The capital acts as a depot, from which the player can hire new Explorers and equip them with starting capital.

7.5.2 SUB MENU - LEADERS
With this option you may examine any of your Explorers.

7.5.3 SUB MENU -MAPS
With this option several maps can be displayed :
a) Political map - shows the players territories in their colours.
b) Economic map - shows the profits of each colony; the brighter the colour, the more taxes are collected.
c) Terrain map - displays the terrain types in their colours.
d) Geographical map - shows the terrain map in the original size.

The three maps fit into 1 screen each. Each square is displayed as 2 X 2 pixels. The current Explorers position is shown as a flashing square. Only terrain squares entered by friendly Explorers are shown.

7.5.4 SUB MENU OPTIONS

7.5.4.1 GRAPHICS ON/OFF

7.5.4.2 EFFECTS ON/OFF

7.5.4.3 BACKGROUND MUSIC ON /OFF

7.5.4.4 SOUND ON / OFF

7.6 THE END MENU
The order input for an Explorer can be terminated before all his command / movement points are used by pressing " Esc ". You will then be asked if you wish to ' wait ' or "end " the turn. If the turn is ended the Explorers loyalty and morale will be improved by 20% of the remaining command / movement points. This option is useful for increasing the values of an exhausted Explorer.

7.7 THE COMPUTER ENEMY
The presence of natives known as the " Cayas " makes the game far more difficult. They will be controlled by the computer, expand their territories and accumulate victory points. They may even win the game . . . . Caya settlements can be wiped out by plunder. Any gold found will be captured. The amount of gold is dependent upon the Caya settlements gold reserve.

8.0 LAND BATTLE

8.1 GENERAL DESCRIPTION
In the case of a battle, human players can decide to whether to fight a detailed tactical battle or a strategic battle. At the beginning of a land battle, the players must place their units on the screen. By clicking the left mouse button a red cursor will be positioned under the mouse pointer. Position the unit with arrow keys, number pad or keys around the (S). Pressing (Return) will place the unit. if players select a strategic battle, the computer will carry out this task. If two computer operated Explorers take part in battle, it is always resolved on a strategic level.
The tactical land battle is divided into two large parts (see 8.4.2). The first part consists of a) to k), the second one of l) to v). Player A is the explorer that started the attack during the action phase. In the first part player A is referred to as the attacker (Att), player B as the defender (Def). During the second part player B becomes the attacker and player A the defender. The information on screen changes accordingly.

8.2 THE SCREEN DISPLAY
The left part of the screen displays the battlefield, and the right side displays information on your troops etc. Here to, as in the Action phase there is an Icon bar which operates as described in chapters 2.3 and 2.4. If the active unit is clicked on with the mouse or if the (S) or (5) keys are pressed, the overall summary of both combatants is displayed. Depending on the terrain type of the square on the strategic map where the battle takes place, the programme can provide over 160 different tactical maps. Each unit has the following values :

Strength (ST) : The number of casualties it can suffer before being destroyed.
Movement points (MP) : Movement points are used when a unit moves from one square to another. At the start of each movement round new movement points are received. Morale, however is of importance here.
Supply points (SU) : A unit consumes supply points for almost every action it undertakes. An attack, especially requires a large number of supply points. If the number of supply units drops to 0, the unit will cease to exist at the beginning of the first supply phase of a new battle round.
Supply status (S Status) : This value indicates the maximum number of supply units that can be received per supply phase. This number depends on the distance to the nearest depot and on the season. During best conditions in summer, the maximum value is 200 if the unit is directly adjacent to a depot. Each further square distant from the depot decreases the supply rate by 40 supply units. If a unit is directly adjacent to an enemy unit, the supply status is further reduced by 40 supply units.
Morale: The fighting spirit of the unit. Low morale will decrease the movement allowance of a unit and influence it's strength.
Endurance :This value indicates the exhaustion level of the unit. If this value falls to 0 the unit has to rest. At this point it can carry out no order. Endurance can be increased by not using the full movement allowance of a unit.

8.3 STRATEGIC BATTLES

8.3.1 GENERAL DESCRIPTION
This variant is easier and faster to play than the tactical execution. It's purpose is to quickly resolve battles where victory for one side is certain.

8.3.2 PROCEDURE

The strategic battle phase is carried out in several short pulses. The computer calculates the current battle strengths of both sides and displays . them on screen. It is abbreviated ' BS ' Losses from the previous round are shown ' LO '. The attacking player is marked (A) and the defender (D). In the appendix a full explanation is given on how the battle strengths are calculated with tables and examples.

Both players will have to choose their respective attacking / defending strategies. When doing so it is preferable for the other player not to watch the input !

Each side has 4 different strategies to choose from ;

ATTACK:	FRONTAL	OUTFLANKING	MOBILE	STRATEGEM
DEFENCE:	A T T A C K	ATTACK		
Counter attack	15 / 15	15 / 10	**5/20***	**20*/5**
Dig in	**5/20***	**20' /5**	l0/ 15	5/ 10
Delay	10 / 10	**5/20***	**20*/ 5**	**10/15**
Retreat	**20*/ 5**	10/15	**15/10**	**15/20***

(*) : The enemy side looses 1 unit (strategic battle) or has to retreat.
Example 10 / 20
Attackers strength = 100, defenders = 20
The attacker causes the defender to loose 10% of the attackers strength points (10). The defender causes 20% of the defenders strength points (4). These losses are maximum values however.

8.3.3 CALCULATING LOSSES

Losses are calculated according to the table under 8.3.2, although the numbers given are the maximum achieveable. If a unit is destroyed, the programme selects it according to a particular routine. More details can be found in the appendix. If a depot is captured, the active player will also receive some of it's supplies. If the enemy owns 2 depots and one is captured, half his supply units will change hands. This is also true of transports and gold units. For each battle round, 200 supply units + 10 supply units per unit are required. Battle continues until one side has insufficient strength points or supply units remaining to prolong the battle. At the end of battle the victor receives the remaining supply / gold units

only if he can transport them. It is possible for both sides to destroy each other so that there is no winner. This can also happen during a tactical battle. Ending a battle is explained under chapter 8.4.7.

8.4 TACTICAL RESOLUTION

8.4.1 GENERAL DESCRIPTION

In a tactically resolved battle both players (computer or human) have the opportunity to move their units individually. This can make the campaigns far more interesting and challenging. By selecting (Help) on Amiga or (End) on PC, A summary of the on screen symbols will be displayed. A mouse click or key press will return you to the main menu.

8.4.2 PROCEDURE

During tactical battles, one game turn consists of the following phases :

a) supply phase player A
b) movement phase player A
c) supply phase player A
d) movement phase player B
e) supply phase player B
f) movement phase player A
g) supply phase player A
h) replacement phase player A
i) battle phase player A
j) replacement phase player A
k) supply phase player A
l) supply phase player B
m) movement phase player B
n) supply phase player B
o) movement phase player A
p) supply phase player A
q) movement phase player B
r) supply phase player B
s) replacement phase player B
t) battle phase player B
u) replacement phase player B
v) supply phase player B

The phases are carried out sequentially. At the end of each turn, each unit receives 2 experience points.

8.4.3 THE SUPPLY PHASE

8.4.3.1 DETERMINING THE SUPPLY STATUS
In order to carry out it's tasks effectively, a unit has to be tied to a supply network. Each depot under an Explorers control acts as a supply source. A depot can distribute supply units up to 5 squares away. Therefore a unit 6 squares distant will be unsupplied. The supply ability of a depot however, varies with the seasons. Depending upon the weather the maximum supply distance decreases, as can be seen from the following table. Under each distance the number of supply units the unit can receive is listed:

Number of squares

Season	1	2	3	4	5
Spring	160	120	80	40	0
Summer	200	160	120	80	40
Autumn	160	120	80	40	0
Winter	120	80	40	0	0

The shorter the distance to the depot, the more supply units a unit can receive per supply phase. In order to guarantee short supply lines, even in winter at least 3 depots should be used. Supply status can be seen in the unit summary. If a friendly unit is directly adjacent to an enemy unit it's supply state will be deceased by 40 supply units.

8.4.3.2 DISTRIBUTING SUPPLY UNITS
Depending on it's supply status a unit can receive a varying amount of supply units. The players will have to distribute supplies to their units. The computer will list sequentially all units capable of receiving supplies. The available supply units, together with the supply demands are displayed. The player may allocate supply units as he chooses.

8.4.3.3 LACK OF SUPPLY
At the start of each players supply phase each unit will consume 10 supply units in order to guarantee a minimum supply (water, food etc.). If the number of supply units held by the unit falls to 0 after having received new supply units, the unit ceases to exist and is lost. It is easier therefore to keep units within range of depots.

8.4.4 THE MOVEMENT PHASE
The computer will select each unit in turn so that the player may issue orders to it. By pressing F1 it is possible to switch between different units. By using the direction keys the current unit may be moved in that direction. Each movement costs movement points and supply units. Details are given in the appendix. If a unit does not have sufficient movement points or supply units, it will not be able to move further. Furthermore, the movement points used for entering the square will be deducted from the endurance value. Engineers are the only troops that may enter a river square. If an engineer enters a river in the next turn the computer will ask whether the engineer will build a bridge there. If the answer is " yes " the engineer will lose all movement points and a bridge will be constructed across the river. A bridge costs 20 supply points and 5 endurance points. Enemy units have a zone of control, made up of the 8 squares surrounding the unit. These squares cannot be freely entered. If a unit advances into an enemy zone of control, it loses all movement points for this turn. However, enemy units can only be attacked if they are within a zone of control exerted by friendly units, i.e adjacent to the attacking units.
At the beginning of each movement phase all units receive new movement points, depending on their current morale. If a unit only has a morale of 75, it receives 25% less movement points. The maximum number of movement points possible is shown in brackets in the units summary beside the current value. If a unit is adjacent to one or more depots, the unit can be resupplied. Press F1, the computer will go through all available depots and you may transfer supply units using (+) / (-). press (Return) to end input.
Units may also be moved by mouse. Click onto an adjacent square and the unit will move. By clicking on the (Esc) icon or pressing the (Esc) key you will be taken to the cancel menu. By selecting the ' wait " option, the current unit will be ignored and the next unit activated. When you end your turn, the remaining movement points will be used to increase the endurance rating.

8.4.5 THE REPLACEMENT PHASE
During the battle phase some units will lose strength points. Not all losses however, represent dead. A %, depending upon the administration and experience level of the Explorer, will return as replacements. Strength points

can only be added as replacements to units if they are in supply. For each troop type a special pool exists : infantry, artillery, cavalry and engineers. Use the (+) / (-) to add replacements. This will result in a loss of experience points. The computer will list available replacements.

8.4.6 THE BATTLE PHASE

8.4.6.1 GENERAL DESCRIPTION
Each enemy unit located in a friendly zone of control can be attacked during this phase. Select the enemy unit you wish to attack, press F1. The computer will now display all available units which can attack this target. The player can then decide which units to attack with using the ' yes ' / ' no ' boxes. When moving the cursor around on the screen, the general data is listed in the info window. If the cursor is positioned on a unit, it's values are shown. Only Governors, Generals, Infantry, Cavalry, Artillery and engineers can be sent into battle. These units will need to have enough endurance and supply units remaining. Each unit requires 5 supply points per strength point in order to take part in battle.
Just as in a strategic battle each player must choose an attack / defence strategy. Losses are calculated similarly, but in a tactical battle the strength of each combatant is determined differently. More details in the following chapters.

8.4.6.2 CALCULATING THE BATTLE STRENGTHS
First the battle strength multiplicator is determined. The base for this is the strength of the unit. Each terrain type has a specific defence value. The defenders strength is multiplied by this value. The appendix contains some tables for further explanation. Each unit requires 2 supply units per strength point for defence. If a defending unit has insufficient supply points it's strength will be halved.
Next a status multiplier is determined. Each unit type has a certain base value :
- depot : 0
- colonist : 1
-transport: 1
- light infantry : 2
- heavy infantry : 3
- engineers : 3
- artillery : 4

- cavalry : 5
- Explorer : 6

A defender adds 10 % of his experience points to this value, the attacker 8 %. Furthermore, both sides add 4 % of their morale values. Each friendly unit adjacent to the defending unit then adds 2 points to the status multiplier of the defender.
Each unit that does not take part in the attack but is adjacent to the defender, adds 3 points to the attackers value. For each artillery unit taking part in the attack, another 10 % is added.
Now for each side the strength multiplier is multiplied with the status multiplier. The result is then divided by 20. This result is the number of battle points. These points can decrease depending on the weather.

8.4.6.3 CALCULATING THE LOSSES
Depending on the respective attacking / defending strategy the losses are calculated according to each sides success. If the enemy side suffers a 10% loss, this always represents a maximum value which can be changed within the routines by up to 66%. In the appendix a typical battle is explained.
The losses calculated are then distributed equally among the units taking part in the battle, beginning with the least experienced units. Depending upon the administration and experience of the Explorer, some troops will return as replacements later.
If the result in the combat results table is followed by a ● , the defending unit has to retreat, unless destroyed. Select the square it retreats into with the direction keys / mouse. If a unit is unable to retreat it is destroyed. It is also possible that an attacking unit may have to retreat. Here the same rules apply as for a defender.
If the defending unit is destroyed, the attacker can have 1 or more attacking units advance into the square. First the computer goes through all the cavalry units. Choose ' yes ' or ' no " Cavalry can advance up to 2 squares. In this case the direction of the second square has to be entered. By this you can , depending on the situation, have several cavalry units and one other unit advance.
For each destroyed enemy strength point 2 experience points are added to the units taking part in the attack. For each friendly strength point lost, 1 experience point is deducted. This is true for both sides. The units which possess the lowest experience are at an advantage. For each enemy unit totally destroyed, victory points are earned.

The number of victory points is determined as follows : Purchase costs divided by 5. Thus , an eliminated artillery unit would earn 5 victory points. For each unit lost and for each unit that has to retreat, the owning player will lose 5 morale points, while the victorious units receive 5 morale points.

8.4.7 VICTORY DETERMINATION
A battle is concluded when the Explorer is killed. The victorious player receives 20 victory points and his Explorer 1 administration point and, if appropriate, the captured supply and gold units. This is also true for the strategic battle variant. After this, play continues normally.

9.0 SEA BATTLES

9.1 THE SCREEN
The left of the screen displays the battle display and the right the data displays for each Admiral. The first line shows the current player and the wind velocity. Abbreviations are :

Administration : (A)
Number of ships : (SHP)
Experience : (E)
Morale : (M)
Number of gold units : (Gold)
Number of supply units : (S)

As at the start of land battles, the players units must first be placed on the map (see 8.1) If two computer players fight a battle, the execution speed can be increased by pressing any key.

9.2 ORDER OF PLAY
Once the players have placed their ships on the map, players may issue orders to them. Each ship can carry out 1 order per turn. After the order has been entered the ship will attempt to carry it out immediately. As soon as every ship on one side has received an order, the pulse is ended and the play switches to the other player. Each ship requires 5 supply units per pulse. Each broadside fired costs 5 supply units.
The battle continues until one of the following conditions is fullfilled : .

a) One player has no supply units remaining.

b) One player has lost all his ships.
c) Only ships of one player are in the battle area.

The other side will then win the battle. However, it is possible that both sides will destroy each other entirely.

9.3 SHIP DATA
Each ship has a number of characteristics. Before a player issues an order to a ship, the following information is displayed :

Hull : 90 % (Condition of the ship's hull. In this case damaged by 10 %)
Rigging : 80 % (Condition of the ship's sails. In this case damaged by 20 %)
16 Guns 17 : (Number of guns available; port and starboard listed; up to 18 per side)
Ammo : Grape shot. (Ammunition type. Two types are available: round and grape)
Crew : 170 (Maximum crew 200)
Sail : Full (This has an impact on the ship's speed. There are five possibilities.)
Load : Depot (Each ship can transport a military unit which accompanies the Admiral)

9.4 SHIP MOVEMENT

9.4.1 GENERAL DESCRIPTION
The computer selects each ship individually. If you wish to omit the current ship click the left mouse button on (Esc) icon or press (Esc). Ships that have already moved will displayed in grey.. The current ship is outlined in red. Enemy ship which can be fired on are outlined in white. One selected as a target an enemy ship is outlined in yellow.

9.4.2 ORDERS ,

9.4.2.1 AMMUNITION
With this order you can change the ammunition type or the firing direction of the guns. Normal (round) ordnance should be used against the hull as it causes more damage than grape shot, which should be used against the rigging.

9.4.2.2 SAIL

By choosing the type of sail, players set the ship's speed.
There are 5 possible settings :

                    000 % : No sail
                    025 % : l/4 sail
                    050 % : half sail
                    075%: 3/4 sail
                    100 % : full sail

As long as the sail is set the ship will continue moving. Depending on the wind velocity, the distance will vary. This distance is calculated by : (wind velocity + 1) x sail x rigging.

Example : Wind velocity - 3; Sail - half; Rigging - 50 %.

Result : $(3 + 1)$ x 0.5 x 50 % = 1 square

This ship will move 1 square. Should the value be less than 1, it is determined randomly whether the ship continues moving. This chance decreases in line with damage to the rigging.

In order to change sail, a ship requires a crew of at least 40. If the rigging value is less than 30 %, the sail is considered destroyed and the ship will be unable to move.

If the way is blocked by another ship, it will be rammed. Both ships will be damaged. The ship being rammed will suffer more damage if it is rammed from the side. A high experience value will limit damage.

If a ship leaves the battle area, it will re-appear some pulses later. Again the owning player has to choose a starting position. During the ' battle pause ' the crew will repair some damage. A high experience and administration value is an advantage.

9.4.2.3 FIRE

All enemy ships within range will be highlighted. Your gunners can fire at one ship on each side. If more than one target is available you will have to select your preference.

The efficiency of a broadside is dependent upon the number of guns, the distance involved and a random factor. Each gun requires 4 crewmen to operate it. If insufficient crewmen are on board, some guns will not be used. Just as with ramming, a damage message will appear. The values shown should speak for themselves. If the hull value falls to below 50 %, the ship may sink. For each enemy ship sunk 10 victory points are awarded, morale

increases by 2 points and experience by 5 points. Enemy morale drops by 2 points.

9.4.2.4 COURSE

With this order you may alter the movement direction of a ship. The course can only be set if the sails are raised. If you do not wish to give an order to a ship, you may end the order input by selecting " maintain course ". By each direction change the ship turns starboard (right) or port (left) by 45 degrees. The ship will then move in this direction according to it's speed. Care is needed during turning procedures as it is possible to ram friendly ships.

9.4.2.5 SELF DESTRUCTIONS

Sometimes, it is an advantage to destroy friendly ships in order to prevent them falling into enemy hands. Use this order with caution however, as battles are not predetermined. Never give up hope!

9.4.2.6 BOARDING

Boarding enemy ships is one of the most interesting features of the game. In order to board a ship, the enemy ship must be alongside, either on port or starboard. The current direction of movement of the enemy ship is of no importance. The friendly ship can only make a boarding attempt if it has an engineer unit, a light infantry or a marine unit on board. If two enemy ships are in a position to be boarded, you must select a target. Follow the on screen prompts.

Success or failure depends upon your Admiral's statistics, the enemy Admiral's statistics, the boarding crew and the crew on board the enemy ship. A high administration value and a high morale value are also of an advantage. It is also easier to board an enemy vessel if it is transporting no other troops than it's crew. A boarding party that has to fight an enemy crew and a well trained infantry unit will have difficulties. Engineers are better suited to boarding than normal infantry. Marines are best of all.

If an enemy ship is boarded successfully, it is captured by the victor. A small prize crew will take command. For successfully boarding a ship, 20 victory points, 5 morale and 10 experience points are gained. The enemy loses 5 morale points.

If the boarding action fails, the boarding party will be eliminated. If you attempt to board an enemy ship which transports light infantry, engineers or marines, it is possible that the enemy will attempt to board your ship in

order to seize it. If this action is successful then the enemy will be awarded 20 victory, 6 morale and 3 experience points. The attacker will lose 6 morale points.

If a ship which carries a depot or transport unit is seized, the victor receives the corresponding supply and / or gold units as well as the accompanying troops.

Example : The enemy has 2 transport units on board of his ships. One of them is captured as a result of a boarding action. The victor receives half the gold as well as the transport unit. Normally an Admiral can only command up to 8 ships. However, by boarding and capturing this number may be increased to 15, with all surplus ships having to be abandoned. It is therefore possible for the player to build huge galleon or piracy fleets if they concentrate on boarding. Large gold transport ships can only be obtained by boarding and Admirals with 8 or more ships are well suited to escorting gold transports back to the capital or acting as pirate hunter or for that matter pirate.

9.4.2.7 MOVING GUNS

With this order it is possible to move guns to different positions on board. Thus if a ships guns have been damaged on one side it is possible to move some guns from an undamaged area to improve the position. The maximum number of guns per side is still 18 however.

9.5 VICTORY AT SEA

A sea battle ends if one side has no supply units remaining or no ships left in the battle area. The victor receives 20 victory points. Morale increases by 5 points and experience by 10. The victorious Admiral receives 1 administration point.

If the enemy lost the battle because he ran out of supply units, the victorious Admiral captures all remaining ships. If all ships in the battle area are destroyed or captured, all enemy ships which are currently outside the battle area are also captured. If the defeated Admiral still possesses gold units or supply units, they are also taken by the victor. It is also possible that the defeated Admiral had an explorer on board. The gold units and supply units of the Explorer are also captured. Embarked Explorers travel on the support fleet of the Admiral. These fleets consist of several small ships which can only be used for minor tasks. As they cannot take part in sea battles, they are not shown on the display.

10.0 PLAYING TIPS

At the beginning of the game you should hire at least 2 Admirals and Governors. The Governors should be given some colonists and at least 1 engineer and an additional depot. Also ensure they are given sufficient gold and supply units. Once this has been done have your Admirals load the Governors and set sail in any chosen direction. Try to discover a coastal area with your Admirals as soon as possible. Once a coastal area is found, disembark the Governors and use them for further exploration.

As many harbours as possible should be built in the new world in order to ensure smooth movement of gold and supply units. After securing harbours the Governors should be moved inland to colonize the newly gained territory. Once the first colony reaches a reasonable size you should begin to collect taxes and transport them to the capital. The computer opponents will start several missions at the beginning of the game and will discover vast lands and begin to colonize them. After 2 to 3 years your computer opponents will become aware of you and the competition for the best colonies and sea routes will begin in earnest. By this stage you should have well equipped Admirals and Generals. Sea battles will be especially important, as he who controls the sea routes, controls the game.

In order to achieve victory the following should be noted :

a) Protect your colonies from possible invasion, with several generals.
b) You should equip your Explorers with gold from the colonies as soon as possible to avoid draining the gold reserves of the capital.
c) Form a reserve of Explorers in time. If you lose 2 or 3 sea battles within a short time, you will become a mere marionette, guaranteeing victory points to your opponents. Losses need to be replaced immediately.

11 .O APPENDIX

11.1 TERRAIN TABLE (Action Phase)

TERRAIN TYPE	MOVEMENT POINTS	SUPPLY POINTS
Unknown	2	2
Sea	2	2
Swamp	16	8
Mountain	12	6

Hill	8	4
Forest	6	2
Plains	4	2
Desert	6	12
Coast	4	2
Mountain - colonized	4	2
Hill - colonized	4	2
Plains - colonized	2	2
Harbour	2	2
Mine	4	4
Settlement	2	2
Cayas settlement	2	2
Capital	2	2

11.2 TERRAIN TABLE (Battle Phase)

TERRAIN TYPE	MOVEMENT POINTS	SUPPLY POINTS	DEFENCE FACTOR
Lake	-	-	
River	(4)	(12)	1/2
Bridge	2	2	1/2
Road	2	2	
Settlement	2	2	2
Cayas settlement	2	2	2
Fortress	2	2	5
Plains - colonized	2	2	
Plains	4	2	1
Forest - colonized	4	4	2
Forest	6	4	2
Hill - colonized	6	6	3
Hill	8	6	3
Mountain - colonized	8	8	4
Mountain	10	8	4
Swamp	12	16	4

Desert	10	20	1
Mine	8	8	4
High mountain	-		

For diagonal movement during the action or battle phase add 50% to the required number of movement and supply points. Only engineers can move into river squares. High mountains and lakes are impassable. Bridges can only be constructed by engineers. The defence factor shows the increase in the battle strength of the defending unit.

11.3 THE ORDERS

COMMAND POINTS				ORDER	MOVEMENT POINTS			
GOV'NR/ADMIR/GEN/COMM					GOV/ADM/GEN/CO			
1	1			Move	?	?	?	-
1	6	8|	-	Attack	?	?	?	-
	1	-	-	Embark Explorer		1		-
	1	-	-	Disembark Explorer		1		-
1	1	1	-	Load gold	1	1	1	-
1	1	1	-	Unload gold	1	1	1	-
4		2	-	Plunder	?		?	-
1		2.	-	Colonize	?		?	-
1		2	-	Build harbour	6		9	-
2		4	-	Build settlement	8		12	-
1		2	2	Expand settlement	4		6	6
1	1	1	1	Buy supply units	1	1	1	1
1	1	1	1	Sell supply units	1	1	1	1
1		2	2	Earn profits	1		2	2
6	4	4	4	Recruit	1	1	1	2
1	1	1	1	Reorganize	1	1	1	1
1	1	1	1	Subsidies	1	1	1	1
6	4	4	4	Training	10	5	5	5

Order cannot be issued : -
Movement points : ? (see terrain table)

11.4 COSTS

ACTION	GOLD UNITS REQUIRED
Hire Governor	25 - 100 gold units
Hire General	50 - 100 gold units
Hire Commander	25 - 100 gold units
Hire Admiral	75 - 100 gold units
Light Infantry	10 gold units
Heavy Infantry	15 gold units
Cavalry	20 gold units
Marines	20 gold units
Artillery	25 gold units
Engineer	15 gold units
Fleet	50 gold units
Depot	5 gold units
Transport	5 gold units
Mine	100 gold units + 4000 supply units
Colonization	10 gold units + 100 supply units per colonist
Build harbour	30 gold units + 1,000 supply units
Build settlement	60 gold units + 2,000 supply units
Expand settlement	40 gold units + 1,500 supply units
Training	50 supply units per battle unit
Gift (+ 1)	5 gold units for Explorer
	1 gold unit each per battle unit
Supply units	100 supply units for 1 gold unit (buy)
	1 gold unit per 200 supply units (sell)

11.5 UNIT DESCRIPTION

UNIT TYPE	-	P	O	I	N	T	S	BASE VALUE
Fleet						100%		
Admiral								-
Governor	12					10		6
General	16					20		6
Commander	14					15		6
Light infantry	16					12		2
Heavy infantry Marines	12					16		3
Cavalry	24					12		5
Artillery	12					8		4
Engineer	16					(2)		3
Depot	12							(0)
Transport	16					(2)		(1)
Colonist	12					(2)		(1)

11.6 BATTLE EFFICIENCY AND SEQUENCE OF LOSSES (STRATEGIES)

UNIT TYPE	ATTACKER	DEFENDER	SEQUENCE OF LOSSES
Explorer Marines	100 %	250%	
Light infantry	100 %	200 %	3
Heavy infantry	150%	150 %	4
Cavalry	200%	100 %	2
Artillery	250%	100 %	5
			1
Depot	0 %	50 %	6
Transport	0 %	50 %	7
Colonist	0 %	50 %	8

The battle strengths of all units will be modified by the values shown. Units are eliminated in the sequence given. Engineer unit must be towed by cavalry unit and so on.

11.7 SEASONAL CHANGES TO BATTLE STRENGTH AND MAXIMUM SUPPLY DISTANCE OF A DEPOT

SEASON	ATTACKER	DEFENDER	SUPPLY LINE LENGTH
Spring	75 %	100 %	4 squares
Summer	100%	100 %	5 squares
Autumn	75 %	75 %	4 squares
Winter	50 %	100 %	3 squares

At 75 %, for example, battle strength would be reduced by 25 %.

11.8 ATTACK AND DEFENCE TABLE

The following table is expressed in % values and not strength points.

ATTACK	FRONTAL	OUTFLANKING	MOBILE	STRATEGEM
Counter	15/ 15	15/10	5/20*	20*/ 5
Dig in	5/20*	20*/ 5	10/15	5/1O
Delay	10/ 10	5/20*	20*/ 5	10/15
Retreat	20*/ 5	10/15	15 / 10	15 / 20*

• = Opponent loses 1 unit (strategic battle) or has to retreat (tactical battle).

11.9 BATTLE EXAMPLE (TACTICAL RESOLUTION)

A General is under attack from 1 infantry, 1 cavalry, 1 artillery and 1 engineer unit. The General is in a settlement. It's rear area is guarded by 2 units. It is spring.

The defenders values are :
General :
Morale : 100
Experience : 150
Supply units : 30
Terrain : Settlement
Battle strength multiplier of the defender :

16 (battle strength) x 2 (settlement) = 32 / 2 (because of lack of supply) = 16

Status multiplier of the defender :

6 (base value) + 4 (2 adjacent units x 2) + 15 (experience x 10 %) + 4 (morale x 4 %) = 29

Battle points of the Defender :

16 x 29 x 100 % (season) = 464 / 20 = 23.2

Values of the attacker

Infantry : Battle strength : 16
Morale : 100
Experience : 100
Supply units : 100

Cavalry : Battle strength : 12
Morale : 100
Experience : 100
Supply units : 100

Artillery : Battle strength : 16
Morale : 100
Experience : 100
Supply units : 100

Engineer : Battle strength :8
Morale : 100
Experience : 100
Supply units : 100

Battle strength multiplier of the attacker :

16 battle strength infantry) + 12 (battle strength cavalry) + 12 (battle strength artillery) + 8 (battle strength engineer) = 48

Status multiplier of attacker :

2 (base value infantry) + 5 (base value cavalry) + 4 (base value artillery) + 3 (base value engineer) + 32 (sum of experiences = 400 x 8 %) + 16 (sum of morales = 400 x 4 %) = 62 x 110 % (artillery support) = 68.2

Battle points of the attacker :

48 x 68.2 x 75 % (season) = 2455.2 / 20 = 122.76

The attacker chooses a " frontal " attack, whilst the defender decides to " delay "./ The result is 10 / 10. The attacker will eliminate 4 - 12 enemy strength points, the defender 0 - 2.

11.10 BATTLE EXAMPLE (STRATEGIC RESOLUTION)

In a strategic battle, the battle strength of a single unit will be multiplied by the battle efficiency (see 11.6). Furthermore, this value will be multiplied by 1 % of the morale and 1 % of the experience. Then all the values of all the units are added and multiplied by the season factor. Eventually, each battle unit of a fighting unit type (infantry, cavalry, artillery, engineer) increases the current value of the result given by 10 %. This result is then divided by 4.

Example :
A General attacks with 3 infantry, cavalry, artillery and engineer units as well as with 2 depots and 1 transport. It is autumn. Morale and loyalty are 90 % each, administration and experience are 160 each.

General : 20 (battle strength) x 100 % (experience) x 0.9 (loyalty)
x 1.6 (administration)
+ 3 infantry 48 (battle strength) x 100 % (experience) x 0.9 (morale)
x 1.6 (experience)
+ 3 cavalry 36 (battle strength) x 200 % (experience) x 0.9 (morale)
x 1.6 (experience)
+ 3 artillery 36 (battle strength) x 250 % (experience) x 0.9 (morale)
x 1.6 (experience)
+ 3 engineers 36 (battle strength) x 100 % (experience) x 0.9 (morale)
x 1.6 (experience)

= 365.76 x 75 % (season) = **274.32**

274.32 + 30 % = 356.62 (3 x 10 % for infantry)
356.62 + 30 % = 463.61 (3 x 10 % for cavalry)
463.61 + 30 % = 602.69 (3 x 10 % for artillery)
602.69 + 30 % = 783.50 (3 x 10 % for engineers)
783.5 / 4 = ca. 196 (sum of effective battle strength)

The defenders battle strength is calculated in the same manner.
The battle strengths for depots, transports and colonists are added, because their battle efficiency is higher than 0. In contrast to the tactical battle the defence factor of the terrain has no effect. Losses on both sides are calculated in a similar fashion to the tactical battle (see 11.8 for battle tactics). However, here each 2 battle troops cause 1 additional strength point loss to the enemy).