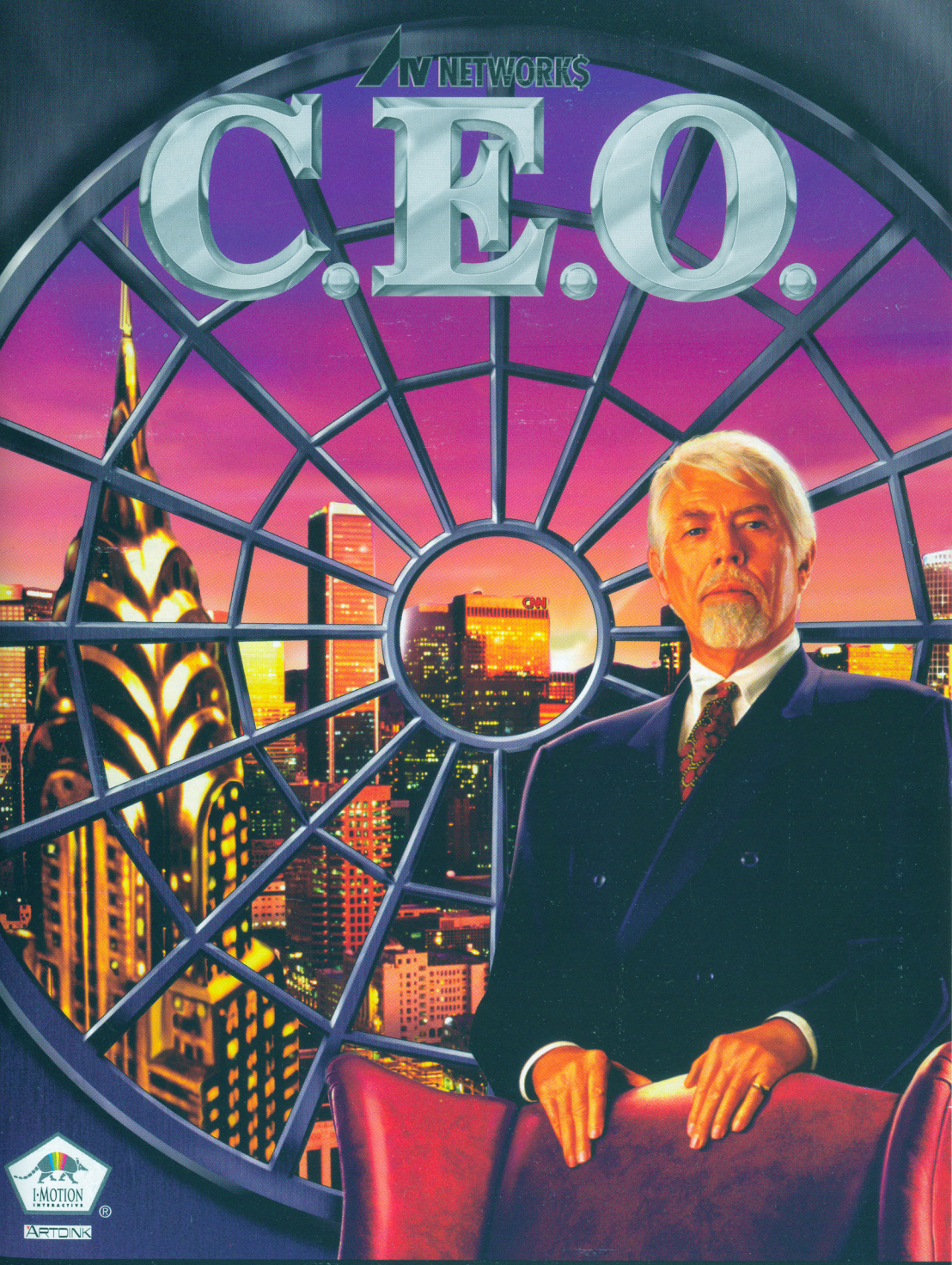

GUIDE TO RUNNING THE A-IV GROUP

C.E.O.

Starring

James Coburn

as

Dwight Owens Barnes

C.E.O.
was created in association with
CNN INTERACTIVE

Special Thanks to
INVESTOR'S BUSINESS DAILY

CONTENTS

PREFACE

C.E.O. is the result of a French-Japanese partnership. The game was originally designed in Japan in 1986 by the Artdink Company and was called A TRAIN. It was an overnight success. In 1988, Artdink created A TRAIN II and then A TRAIN III in 1990. These versions, which were distributed first by Seika Corporation and then by Maxis, were simply updates of the original version.

In 1993, Artdink finished the fourth version of the program, called A TRAIN IV, and was looking for a partner to sell the product in Europe and the United States. An encounter between Bruno Bonnell, Chairman of Infogrames Entertainment, and Tatsuo Nagahama, Chairman of Artdink, resulted in a more ambitious joint venture project.

The idea behind A TRAIN IV was to produce a more complete and realistic product. The initial scaffolding of the joint venture project was put into place. Artdink supplied the basic material and Infogrames committed itself to implement a series of improvements to the product which clearly differentiate it from all other economic simulation products devised to date.

In this fashion, the ideas of "second generation" and "realistic fiction" games were born. Whereas previous games enabled players to become heroes of the past or the future by accomplishing unrealistic exploits in fictional universes, C.E.O. offers players the chance to be a hero in the present by succeeding as chairman of the world's third largest conglomerate. Your challenge is to manage the company, enabling it to prosper and expand its operations, while at the same time thwarting the maneuvers of your competitors.

Today, I•Motion and Artdink are proud to present C.E.O. We sincerely hope that you will have as much fun playing it as we did designing and producing it.

Bruno Bonnell
Chairman, Infogrames Entertainment

Tatsuo Nagahama
Chairman, Artdink Corporation

Yves Blehaut
C.O.O., I•Motion, Inc.

GENERAL DESIGN OF THE SIMULATION

Play C.E.O. and seize the reins of a formidable empire. Your mission is to manage one of the most powerful conglomerates that has ever existed — an organization with its own private highway and rail transportation (passengers and freight) company, a real estate company (engaged in buying and selling land, businesses, commercial and residential properties) and a stock portfolio (buying and selling publicly traded stocks). Your decisions will have an immediate impact on the economic and financial situation of your business. You are the top decision-maker in this sophisticated real-time simulation.

USE OF THE MOUSE

This manual uses the following terms when referring to the mouse cursor: SELECT, POINT, CLICK, DOUBLE CLICK, CLICK AND DRAG.

SELECT means move the mouse cursor to a specific object or place on the screen and press the left mouse button and then release it.

POINT means move the mouse cursor to a specific object or place on screen.

CLICK and DOUBLE CLICK are synonymous with SELECT except that DOUBLE CLICK means rapidly press the left mouse button two times.

CLICK AND DRAG means that, after an object has been selected, you can move it if you keep the left mouse button pressed down.

USE OF THE MOUSE IN C.E.O.

C.E.O. is very easy to play using the mouse. By using a mouse, you have access to all menus (see THE GAME, page 9) and you can open and close all sub-menus. You can lay rails and position trains and buildings on the MAIN MAP. All the menus surrounding the MAIN MAP can be opened by placing the mouse cursor on the name of the menu to be opened and clicking with the left button of the mouse. As soon as the cursor is placed on a menu that can be opened, the menu changes color.

Opening a menu: Click the left mouse button on one of the menus surrounding the main screen.

Closing a menu: To close the menu that you just opened, click the left mouse button again on the same menu, or click the right mouse button wherever the pointer may be.

Opening the TRAIN & BUS, CONSTRUCTION or PROJECT Menus will open a series of sub-menus which will allow you to perform certain operations. Similarly, clicking the right mouse button will close all open sub-menus.

Note: The TRAIN & BUS, BUILD and PROJECT Menus can only be closed by clicking with the left mouse button when the mouse pointer is on one of these menus.

On the other hand, the SATELLITE Menu cannot be closed completely. Its size increases and decreases when you click the left mouse button on the arrows located at both sides of the menu or when you press the CTRL-S keys. (For further details, see SATELLITE, page 11)

USE OF THE KEYBOARD

For ease of operation, it is best to play C.E.O. using a mouse. However, certain functions are accessible by using the following keyboard combinations:

KEY	ACTION
Alt-1	Opens/closes the TRAIN & BUS Menu
Alt-2	Opens/closes the BUILD Menu
Alt 3	Opens/closes the PROJECT Menu
Alt-4	Opens/closes the SALES Menu (3 stages)
Alt-5	Opens the REPORT Menu
Alt-6	Opens the SUBSIDIARIES Menu
Alt-7	Opens the GROWTH Menu
Alt-8	Opens the STOCK EXCHANGE Menu
Alt-9	Opens the BANK Menu
Alt-S	Opens the SYSTEM Menu
Ctrl-S	Opens/closes the SATELLITE Menu (In dual window mode, this command controls the right SATELLITE)
Esc	Cancels the open menu actions (except for the TRAIN & BUS, BUILD and PROJECT Menus)
Insert	Emulates the mouse left button
Delete	Emulates the mouse right button
Arrow Keys ← → ↑ ↓	Move the cursor progressively in the indicated direction
Right Shift + Arrow Keys	Scrolls through the surface area of the map

INTRODUCTION

In 1974, Tatsuo Morato, the Japanese Chairman of the A-IV Group, disappeared from his private yacht near the Bermuda Islands. Today, a news report has announced the disappearance of his successor and current Chairman of the A-IV Group, Dwight Owen Barnes. His airplane, flying over former Yugoslavia when it disappeared, was in contact with the control tower of Tirana for the last time around 8 p.m. yesterday. The airplane was somewhere above the city of Tetovo, 50 kilometers from the Serbian border. The Skopje government claims that it has no information concerning the disappearance of Barnes' airplane and has sent several rescue teams to the area. As yet, no one knows whether the apparent plane crash was an accident or an attempt on Barnes' life. Extreme political tension is mounting in the Balkans and the bad weather that has prevailed in this mountainous region is making it extremely difficult to carry out searches.

Barnes leaves behind a colossal fortune in the form of a very diversified and complex industrial empire. He also leaves holdings of real estate and securities, and a privately owned road and rail transportation company with estimated revenues over four billion dollars. His conglomerate is the world's third largest, ranking just below the ALCORD FOOD and NIPPONMAXITRUST conglomerates. The various companies that comprise the A-IV Group employ more than 45,000 people located across 33 countries. Barnes' disappearance occurred shortly after he signed a number of operating-concession contracts with various governments on behalf of several companies of the A-IV Group.

The world of industry and finance is anxiously awaiting the successor to Dwight Owen Barnes. The A-IV Group needs an efficient business person who is also an exceptional financier, a tenacious negotiator, and a leader with vision who knows how to expand the group's fields of operation. In other words, it needs a real boss who has the ability to rise to the occasion — managing the A-IV empire.

The economic and political data are as follows:

- Profits generated by real estate speculation are taxed at a rate of 50%.
- Profits of the rail transportation company will be subject to a corporate tax at a rate of 50%.
- Credit is limited. No bank will lend you amounts greater than your equity.
- Loan payments and tax payments are not negotiable. All liabilities must be settled on or before the due date.
- Some contracts are already profitable. Your objective is to expand and diversify the group's revenue streams.
- Other operations are running at a loss. It is imperative that you bring operations up to the break-even point, sacrificing, if need be, the less profitable companies before planning any expansion of the group.
- You must resist all kinds of external pressures to ensure the survival of your group.

AVAILABLE SCENARIOS

The following ten scenarios are listed in order of difficulty, from easiest to most difficult. The C.E.O. "Search for the World's Best Manager" competition, which runs for a limited time only (see enclosed package materials), is based upon these ten scenarios. More difficult scenarios will be weighted accordingly; you are expected to master the game's more difficult scenarios if you wish to compete seriously for the title of "World's Best Manager."

For more information on additional scenarios, or order The Official C.E.O. Strategy Guide, please call 800-443-3386.

BERLIN

Following the departure of the Allied Forces from Germany, many tracts of land and abandoned buildings became available for development. Utilizing these raw materials will enable you to create an important economic center in this major European metropolis. You will have to act quickly, however, as other competing financial and industrial corporations are eyeing these properties as well.

Armed with limited cash and few subsidiaries, your profits will depend on how rigorously you manage your portfolio and construction-based investments to maximize the value of your land holdings. In this scenario, your objective is to eliminate or absorb competitors, and develop a giant commercial and industrial complex on which the A-IV flag will be raised.

GÖTEBORG

In Göteborg, the percentage of flat land is at a minimum, while mountainous areas occupy most of the area. The existing railway line is not profitable and does not meet the needs of the population. Consider redesigning the routes of the various trains and turn the transportation system around. The only way to extend your transportation activities is to build elevated stations and tunnels to go through the mountains. Underground construction is extremely costly.

Göteborg's economy would benefit from job creation and tourist development. Overhaul the transportation system in order to augment the economic expansion of this area.

SEATTLE

This scenario includes 2 separate areas, each of which has mini development sections. They are separated by an arm of ocean that penetrates deeply into the interior of the land. The part that is common to these 2 areas is too narrow to contain all the transportation links required. You should have these areas communicate using bridges or going underground.

BARCELONA

Given its location, this Spanish metropolis' industrial potential is linked closely to its harbor and railway activities. Develop industries northwest of the city and employ the railway system to improve property values in the city proper. The A-IV Group should consider acquiring the majority of shares of the Euro Steel, Kyonera, and Morlin companies.

VIENNA

Though not in a crisis period, this Austrian city's economic situation is languishing. On the west side, the mountainous regions are ripe for development. However, the revitalization of the city's inefficient railway system is critical in order to finance the enlargement of the railway and road networks outside the city. Look to develop industrial areas in such a way as to facilitate smart city planning, and utilize ski resorts to increase tourism.

MOSCOW

As the Communist era ends, the world's largest country finds itself facing economic disaster. Moscow is especially hard hit: whole industries are not competitive, the city's huge debt seems insurmountable, and the demoralized city dwellers have little buying power.

Occidental bankers, believing in your ability to spur economic growth, authorize a substantial 3-year loan so that A-IV may help Moscow return to a position of wealth and power. Your objectives are to update the railway and road networks, push for rapid industrial development (buying out antiquated, in-debt companies in the process), and to aid in the creation of trading centers that will enable Moscow's commerce to drive the country's economic restoration. Always cognizant of repaying your loan, you must structure your investments to minimize taxes. Invest wisely in the stock exchange.

PARIS

Paris - the landmark city of art, culture and proving ground for the world's greatest artists - abounds in extraordinary sites and unique historical monuments. Whereas travelers from around the world envision taking in the city's cultural riches, you, as a shrewd business person, envision exploiting many of the city's profit sources. Your objectives are to acquire 5 of the most important city showrooms and find strategic locations in which to erect new ones. At the same time, you must organize the disparate tourist infrastructure (lodging, transportation, food services, etc.) to generate the cash flow necessary to ensure that all A-IV Group investments are profitable.

LONDON

London, Europe's largest city, was among the first to install a metropolitan subway system. Today, that system is showing its age and is a financial drain on the London economy. The A-IV C.E.O. must restore this system to profitability, serving both the private and public sectors needs in the process. A wise manger will ensure that the A-IV Group is noted throughout all of Great Britain for its prominent position of ownership across industries.

CAYMAN ISLANDS

This country is beset with a serious debt which must be repaid in 3 years time. Needing to develop new revenue streams, the A-IV C.E.O. should consider implementing a cost effective railway and highway system, well-located industries, stable residential areas and retail establishments.

WASHINGTON, D.C.

This world city provides the A-IV Group's C.E.O. with the proving ground in which to demonstrate the business acumen deserving of the world's best manager. Transportation issues abound in the U.S. capital. The A-IV Group must dictate strategy for their subsidiaries who own a portion of the city's underground train and subway lines. Revamping the bus system is also a priority. Wholly responsible for this effort, the A-IV Group must address all the strategic issues related to creating a customer-driven and profitable busing network.

Real estate and stock portfolio acquisitions could prove to be valuable investments for shrewd managers who correctly anticipate upturns in the D.C. economy.

THE GAME

The C.E.O. interface consists of the MAIN MAP or GAME SPACE (located in the center of the screen) and of the menus surrounding it. You will be able to make the majority of your decisions and implement them from these menus during game play. (See Figure 1, page 9)

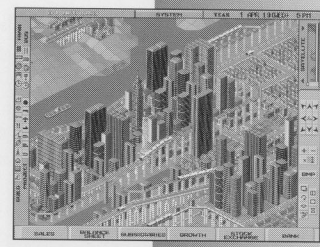

fig. 1

The MAIN MAP represents the main operational canvas. It shows the cities that have signed operating concessions with you. You can move around on the MAIN MAP by using the SATELLITE Sub-menu. (See SATELLITE, page 11). This sub-menu is used to reach any part of the MAIN MAP.

The menus, and sub-menus, placed around the MAIN MAP provide access to several types of specific information. For example, the TRAIN Menu provides access to everything that concerns the management of the railroad company (purchase of trains, construction of stations, laying of rails, etc.). All menus and sub-menus are accessible by clicking the mouse (see USE OF THE MOUSE, page 5) or the keyboard. (See USE OF THE KEYBOARD, page 6)

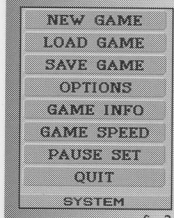

fig. 2

THE SYSTEM MENU

The SYSTEM Menu is located at the top of the game screen and is used to access several sub-menus (or commands), as described in the following paragraphs. (See Figure 2, page 9)

Note: Opening this menu causes the game clock to stop.

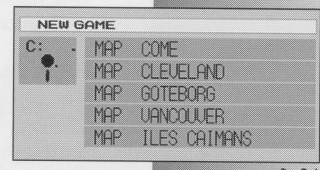

fig. 2.1

NEW GAME

Executing this command displays the various available scenarios (see Figure 2.1, page 9). Each scenario corresponds to a specific geographic location and an increasing difficulty level. You can use this command to start a new game or restart a scenario if you are not completely satisfied with the direction your game is taking.

Note: When you execute this command, the map on the screen is no longer displayed and all the data concerning this scenario is erased unless you have previously saved it. (See SAVE GAME, page 9)

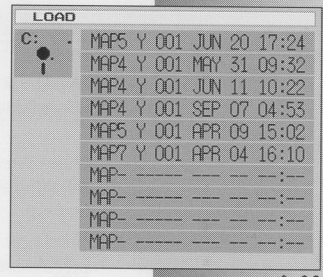

fig. 2.2

LOAD GAME

Selecting the LOAD GAME Sub-menu will enable you to reload a scenario that you started without having to start the game all over from the beginning. The program will display the scenarios which are available for this selection. (See Figure 2.2, page 9)

Note: When you execute this command, the map on the screen is no longer displayed and all the data concerning this scenario is erased unless you have previously saved it. (See SAVE GAME, page 9)

By clicking on the disk icon located at the left side of the save panel, you can select the source directory - either your hard disk (by default C:) or your floppy disk drive (by default A:). (See Figure 2.2, page 9)

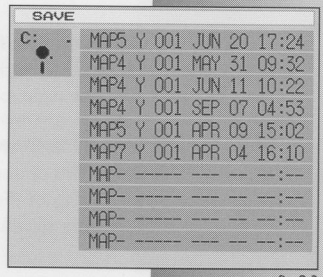

fig. 2.3

SAVE GAME

This command is used to save a scenario (map and data) in the destination directory you choose. Select a location among the 10 choices given to you. The program will automatically record all the data that you can subsequently reload (see LOAD GAME, page 9). (See Figure 2.3, page 9)

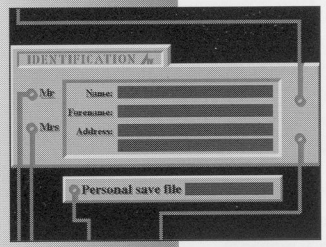

fig. 2.4

You may also save an ongoing game to a disk. Click on the disk icon located at the left side of the save panel. The program will display a new destination directory. Don't forget to have a disk ready to insert in the appropriate drive.

Note: If you choose to save a game on a line that already contains saved data, the previous data will be permanently lost.

To enable several players to use the software, there is a data encryption option, implemented through the use of a secret code. To protect your saved data, choose a secret code and enter it in the identification screen designed for this purpose. (See Figure 2.4, page 10). Other people who do not know the code will be refused access if they try to load a game which "belongs" to you.

Note: If you choose to protect your saved games, do not forget to enter your secret code at the place indicated in the identification screen each time you play C.E.O., otherwise, the program will not allow you to access your data.

Note: The fact that your games are protected does not mean that they are indestructible. Anyone who decides to save an ongoing game on a line containing an encrypted game-save, will immediately erase the existing game. If several people usually play on the same computer, you should be especially careful as to the sharing of the 10 game-save lines and you should also make a back-up copy on a disk.

OPTIONS

This menu is used to set several parameters to customize the game according to your preferences. (See Figure 3, page 10)

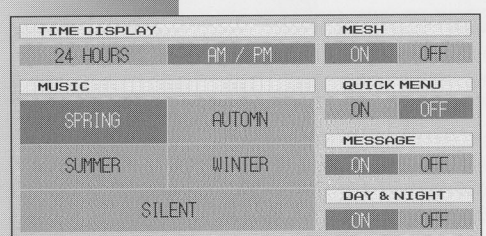

fig. 3

Display Time: This option is used to set the game clock to display the 24-hour format (from 0 to 24) or 12-hour format (1 to 12, a.m. or p.m.)

Music: This option is used to select a sound background to enliven your games. You can also choose to deactivate it by selecting the SILENCE option. (See EXECUTING THE PROGRAM UNDER DOS in the accompanying Technical Manual, and GAME SPEED, page 11 in this manual).

Mesh: This option, which is active by default, is used to display a grid on the ground surface to simplify constructions. Each square in the grid corresponds to a unit of measure.

Quick Menu: This option, which is active by default, is used to replace the TRAIN & BUS, BUILD and PROJECT Menus by a set of icons which automatically open the operational sub-menus.

Message: This command, which is active by default, is used to obtain an unlimited number of suggestions provided by your advisers during a game.

Note: The effect of deactivating this option is simply the elimination of all help messages. Only very experienced players should deactivate this option.

Day and Night: This option is used to adjust the ambient light according to your preferences. C.E.O. includes effects to display different graphic environments according to the time of day or night, or the season.

GAME INFORMATION

This option gives you information on an ongoing game. You can view a complete topographical map of the selected city, an overall map of the railways and roads, and a detailed report on the schedules of the trains and buses running through the town. (See Figure 4, page 10)

fig. 4

Note: You may convert the information regarding the different routes and schedules into bitmap files using the bitmap icon. These files will be saved to your hard disk and can be used in Windows (Viewing and Printing with Paintbrush).

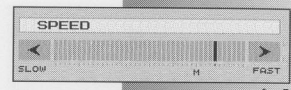

fig. 5

Game Speed: The speed at which time passes can be set to any desired pace. You simply select the one you prefer for action time and reflection time. (See Figure 5, page 11 and EXECUTING THE PROGRAM UNDER DOS in the accompanying Technical Manual)

Pause Set: Apart from usual program stand-by functions, this option is used to set (for each game) a date when the program will automatically stop. (See Figure 6, page 11)

fig. 6

Quit: This option is used to exit the game and return to DOS. (See Figure 2, page 9)

MENUS AND ICONS LOCATED ON THE RIGHT SIDE OF THE SCREEN

In the following paragraphs all the viewing and movement options included in C.E.O. will be described.

SATELLITE

This menu, located in the upper right corner of the screen, displays a reduced-scale image of the complete map (see Figure 7, page 11), including the railways, the roads, the movements of trains and buses and the topological characteristics of the terrain.

To open the SATELLITE, click on the arrows located on both sides of the word SATELLITE. It will reach its largest size after two successive clicks on the arrow.

When open to its maximum size (see Figure 8, page 11), the SATELLITE displays a view of half of the complete map. By moving the cursor (the white bar), you move the area of the map represented inside the SATELLITE.

A white rectangle is displayed on the reduced-scale map of the SATELLITE. This represents the part of the map which is displayed on the screen at the time. If you move the mouse cursor on the SATELLITE map, you will notice that you move a second rectangle of the same size. If you click the left mouse button, the program will display the area of the game included within the limits of the new rectangle. The size of the rectangle varies according to the size of the SATELLITE map.

Note: When the SATELLITE is reduced to its minimum size you no longer have access to bus and train information.

The SATELLITE also gives you access to a seek-and-follow option to keep track of "circulating" trains and buses. To activate this feature, first select the type of vehicle you wish to track. Then select the train or bus number that you want to view. The display of the MAIN MAP will adjust automatically, centering itself around the chosen vehicle.

Note: Some vehicles may temporarily be outside of the map range. In that case, the map will be centered around the next entry point of the vehicle.

Once you can see the vehicle, you will also have access to specific data concerning it: description (model, type of vehicle, number of cars, etc.) and financial data (number of passengers or transported merchandise, cost and income). (See Figure 8, page 11)

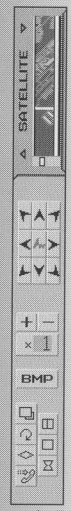

fig. 7

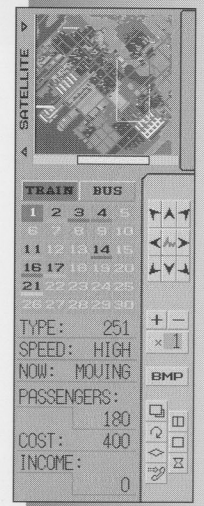

fig. 8

fig. 9

ARROWS KEYS

There are eight movement arrows and they are always available. They are used to move around on the game's MAIN MAP. (See Figure 7, page 11)

The four ← → ↑ ↓ arrows are used to move the game area from top to bottom and from left to right. The four ↙ ↘ ↖ ↗ arrows are used to move diagonally. Use these arrows to make very precise movements in order to lay down rails or build roads and, together with the SATELLITE, define the means of moving around on the main map.

There is a movement index under the movement arrows area. By default, it has a value of one. This means that each click on one of the 8 movement arrows causes a scrolling of one block on the main map. On the other hand, if the index is set to 8, each click on a movement arrow will cause a scrolling of 8 blocks on the main map. By clicking on the "+" or "-" icons you can increase or decrease the setting of this index. The maximum value that the movement index can assume is 99.

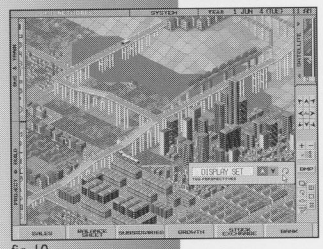
fig. 10

BMP (BITMAPS)

You can convert the area of the game displayed on the screen into BMP files using the BMP icon. These files will be saved to your hard disk in the current game directory and can be used in Windows (Viewing and Printing with Paintbrush).

DISPLAY INDICATOR (Superimposed Boxes Icon)

This indicator is used to go from normal mode to extended mode. This is very useful to get an overview of a section of the map or to see a specific part of the topography of the terrain. (See Figure 9, page 12)

Note: Even in extended mode, all construction options are available. You can, therefore, lay rails and construct buildings in this mode.

ROTATION INDICATOR (Curved Arrow Icon)

This indicator is used to rotate the portion of the MAIN MAP displayed on the screen by 180 degrees. This option is used to see certain areas of the map which might be hidden by existing buildings or natural obstacles. (See Figures 10 and 11, page 12)

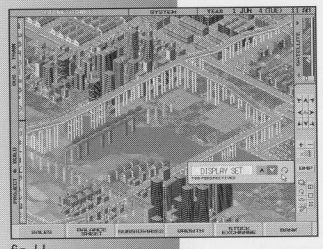
fig. 11

Note: This mode is only available to view buildings. No construction may be initiated from this point.

LEVEL INDICATOR (Diamond Shaped Icon)

This indicator has 3 functions:

1) Clear the view of the MAIN MAP at a certain level in order to enable viewing of low buildings hidden by much higher buildings.

2) Simplify laying of rails and roads at a given height once your map begins to fill up.

3) Organize the construction of underground roads and railway tracks. This indicator is used to adjust the height of constructions, up to 13 levels above the ground and 3 levels underground.

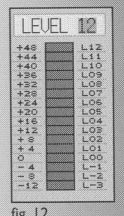

fig. 12

Open the level indicator by clicking on the corresponding icon (see Figure 12, page 12); then select the desired elevation level. Close this menu by clicking the right mouse button. The elevation level will be adjusted automatically.

You must use this option to build roads, tunnels, and underground stations, and to lay railway tracks. Select the underground level at which you want to build. Once the constructions have been completed, connect them progressively to the surface using this same option.

THE TELEPHONE ICON (Telephone Icon)

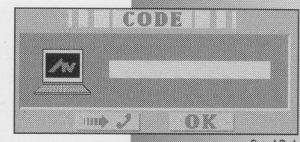

fig. 12.1

This is used to participate in the C.E.O. "Search for the World's Best Manager" competition, which runs for a limited time only (see enclosed package materials). You can measure yourself against other players in the U.S. during this competition. During the game play you can access your I.D. Number and Performance Code by clicking on the icon representing a telephone (see Figure 12.1, page 13). By informing us of this code at 900-7GO-4CEO (900-740-4230), you will have the chance to be ranked among the best C.E.O. players in the United States.

Note: The cost of the call is $0.85 per minute. You must be a least 18 to call. This offer is valid for a limited time only, as per the dates listed on the enclosed package materials.

DISPLAYING TWO PARTS OF A MAP (Two Boxes Icon)

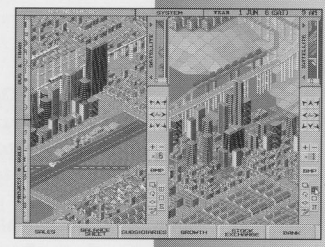
fig. 13

This option is used to split the main screen into 2 parts to show both parts of a map instead of one. By choosing this option, the game area is separated into 2 parts and a second SATELLITE Menu is displayed. (See Figure 13, page 13)

Note: When this option is activated, you should not select SALES Menu.

Note: When this option is activated, it is impossible to undertake construction on the right side of the screen.

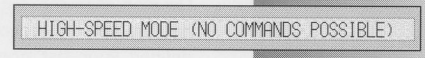

fig. 13.1

OVERALL VIEW OF THE MAP (Single Box Icon)

This option is used, when appropriate, to deactivate the simultaneous display of 2 parts of a map in order to display only one.

HIGH SPEED MODE (Hour Glass Icon)

This option speeds up the game clock time. (See Figure 13.1, page 13)

Note: Once this option has been activated, you cannot execute any other command, nor can you display another part of the main screen. This option must only be used if you want to let a considerable amount of time elapse without performing any actions. To deactivate this option, click the right mouse button.

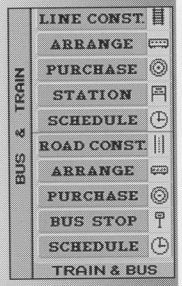

fig. 14

MENUS ON THE LEFT SIDE OF THE SCREEN

TRAIN & BUS MENU

This menu consists of commands linked to the construction and management operations of the transportation companies such as rail laying, road construction and schedule management.

To open this menu, select the gray band bearing the label TRAIN & BUS (see Figure 14, page 14), unless you are already using the QUICK MENU. (See QUICK MENU, page 10)

Note: Opening the TRAIN & BUS Menu does not stop the game clock. On the other hand, opening one of the 10 sub-menus described below will stop the clock.

LINE CONST. (CONSTRUCTION) MENU (Railroad Tracks Icon)

This menu is used to LAY or REMOVE railroad tracks by selecting the appropriate commands in order to build your first railroad line. You can specify 5 different rail configuration layouts (one horizontal, or "at ground level", and 4 inclined, or "elevated"). (See Figure 15.1, page 14)

Lengthening/Removing Existing Lines

In the flat configuration: Select the LINE CONST. Menu (see Figure 14, page 14), click on the Lay icon, then click on the Flat Rail icon. Then place the mouse cursor on the block after the last laid out rail section, (select this block and trace the new track portion). Once you have defined your last portion, click the left mouse button to confirm the layout of the new railroad track. The new section of track will be automatically connected to the existing one.

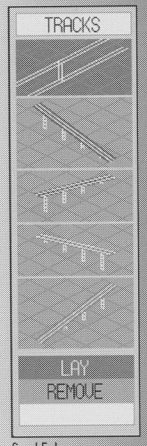

fig. 15.1

In the inclined configuration you have 2 possible choices:

1) If you wish to define an inclined section (in other words, you will continue to climb), select the appropriate slope icon from the RAILROAD TRACK Menu and then define this new section after the existing inclined portion of track. (See Figure 15.2, page 14)


fig. 15.2

2) If you have reached the desired height (in other words, you do not want the track to keep on climbing, you want to lay out the rail flat), select the flat track icon, then select the last inclined track section, and draw your line the same way as for a flat track extension. (See Figures 16.1and 16.2, page 14)


fig. 16.1

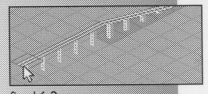
fig. 16.2

Note: If you are not satisfied with the portion of a line that you are in the process of defining, click the right mouse button to cancel the operation.

To eliminate an existing line, select the REMOVE command in the RAILROAD TRACK Menu, select the block(s) to be eliminated and then click with the left mouse button to confirm the operation. The selected railroad track section will be deleted.


fig. 17

Creating/Removing A New Line

Select an area where there is no construction, and choose a starting block (a square on the grid). Move the mouse in any direction and you will see a highlighted line in the game. Click the left mouse button and the final railroad track will appear.

Note: If you are not satisfied with the portion of a line that you are in the process of defining, click the right mouse button to cancel the operation.

To remove a new line, select the REMOVE command in the RAILROAD TRACK Menu, select the block(s) to be removed, then click the left mouse button. The selected railroad track section will be deleted.

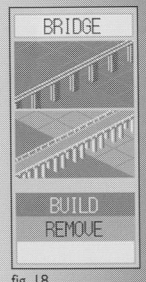

fig. 18

Bridges

Constructing a bridge is possible only at level 0 (see Figure 17, page 14). Open the PROJECT Menu and select the BRIDGE Sub-menu. Two types of bridges are available in C.E.O.: a road bridge and a railroad bridge (see Figure 18, page 14). Select the last laid portion of rail, then move the mouse in the direction of the waterway to be crossed. Confirm the operation by clicking the left mouse button. A metallic structure crossing over the waterway will appear.

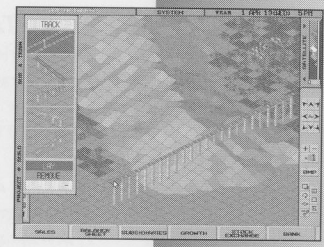
fig. 19

Note: Bridges are only used to cross waterways. It is not possible to build a bridge over dry land. To do so, you would have to use elevated constructions. Moreover, since bridges are extremely expensive constructions, we cannot overemphasize that you study the surrounding terrain carefully first, in order to keep your spending to a minimum. (See Figure 19, page 15)

Underground Construction

To place railroad tracks underground (and thereby avoid cluttering the surface area), you must use the level display option (see Level Indicator, page 12). In C.E.O., you have 3 underground levels available on which you can carry out various projects. You can lay rails on each of the 3 levels. Use slopes to connect underground constructions between the different levels. You can also connect the underground railroad network to the above ground network. (See Figure 20, page 15)

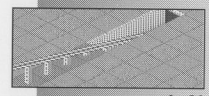
fig. 20

Note: To change from one underground level to another and build on a level surface, align the segments with the foundations of the constructions on the next higher level. (See Figure 21, page 15)


fig. 21

Restrictions

Laying tracks requires following a particular logic in dealing with curves and intersections. You must apply this logic in order to obtain the correct results and optimize your layout.

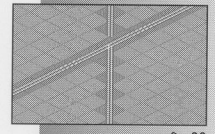
fig. 22

Curves

Generally speaking, beginners should build curves using several straight line mini-segments. Use the grid blocks as reference points (see MESH, page 10) or define the 2 straight lines to be curved, then trace the curve itself. Once you have done this a few times, this operation will become natural to you. (See Figures 22, 23, 24, and 25, page 15)

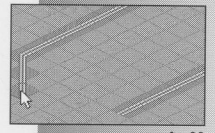
fig. 23

Intersections

One of the more complex operations in C.E.O. involves creating the intersection of railroad tracks. There is a series of simple rules that should be systematically applied in order to achieve a satisfactory result. Refer to the 3 explanatory diagrams for more visual detail.

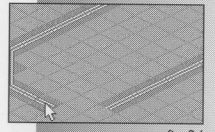
fig. 24

Rule No. 1: Railroad crossings cannot be built at right angles to each other. (See Figure 26, page 15)

Rule No. 2: Crossings between 2 different lines cannot be defined with only one intersection or switching point. (See Figure 27, page 16)

Rule No. 3: Crossing between 2 lines can only be defined with 2 intersections or switching points that provide a junction and then a connection between the tracks at a 45 degree angle. (See Figure 28, page 16)

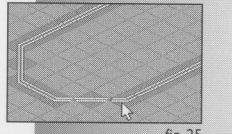
fig. 25

Costs

Costs of laying and removing tracks are always displayed on the last line of the operational sub-menu (see Figure 15.1, page 14). In the specific case of laying railroad tracks, these costs include the purchase price of the land as well as the cost of clearing and leveling it. These costs vary according to the type of tracks you are going to lay (ordinary railroad tracks cost less than Starlight or monorail tracks), the elevation level of the railroad track (construction at the surface level costs less than elevated construction), the nature of the tracks (straight tracks cost less than curved tracks), etc.. Once you remove the tracks, you still own the land on which they were built.

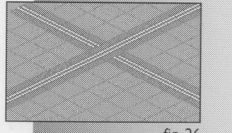
fig. 26

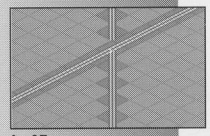
fig. 27

THE STATION MENU (Double Sign Icon)

All scenarios (except for Cayman Islands) start out with at least one existing railway line and one operating railway station. As the cities develop and your business grows, it will be necessary to expand transportation activities by building other railway stations. Open the STATION Menu.

Note: It is important to build a station near each development area as soon as it is feasible. This will stimulate growth in the area and you will benefit from the positive effects of the changes taking place. A development area will grow rapidly if you provide easy access for people and goods.

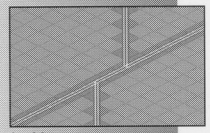
fig. 28

DIFFERENT TYPES OF STATIONS

Click on the PLACE command of the STATION Sub-menu. You can build 2 types of stations. (See Figure 29, page 16):

- Small stations
- Large stations

Each station can be built in 4 different configurations depending on the available railroad line. The only difference (besides cost) between these 2 types of stations is that a station in a city can be extended (and therefore change size) while a country station remains at its original size. Consequently, a small station is more appropriate for the suburb of a big metropolis as well as for the villages surrounding it. On the other hand, large railway stations are more suitable for developing the heart of a major city.

Note: Stations under construction must be adjacent to a straight section of railway track (parallel to the blocks of the grid) for at least 5 blocks. In order for trains to be able to stop, the railway track must be parallel to the platform. (See Figures 30 and 31, page 16)

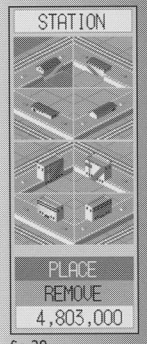

fig. 29

Select the type of railway station you want to build, and then point the mouse cursor on the selected area. A white highlighted rectangle will appear on the game area. Click the left mouse button. The building will be immediately constructed.

Note: Carefully examine the surrounding area where you want to build a railway station. In order to be able to extend the railway at will, try to avoid building a train station next to areas in relief, or close to lakes and oceans.

To remove a railway station, select the REMOVE command on the STATION Menu, then select the station to be removed. The building will disappear. You are, however, still the owner of the land.

RESTRICTIONS

- A station cannot be built on a curve.
- A station cannot be built on a shunting area.
- A station cannot be built on a slope.
- A station cannot be built in front of another station.
- A station cannot be built on a lake or ocean for obvious security reasons.
- A station can only be built if you have first built the beginning of a line.

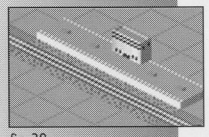
fig. 30

Underground Stations

To build an underground station proceed in the same way as for the construction of an above ground station (the same restrictions apply).

Note: It is impossible to build a small underground station.

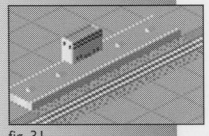
fig. 31

Elevated Stations

Construction of an elevated station follows the same rules as those governing the construction of a surface level station. Check that the straight section of tracks after the slope is long enough (at least 5 blocks) for construction to take place.

Note: It is impossible to build a small elevated station.

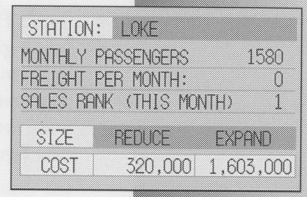

fig. 32

EXPANDING A RAILWAY STATION: LARGE STATIONS AND SMALL STATIONS

Although both large and small stations can be useful in the movement of passengers and goods, they differ in their impact on the local economy. For example, large stations are able to handle substantially larger flows of passengers and freight than a small station. The larger the flow, the stronger the economic stimulus will be to the area. Therefore, it is advisable to replace any existing small stations in areas of growth with larger stations as soon as financial resources become available.

Small stations tend to deter economic growth. Most of the construction in the areas near small stations is residential. Larger buildings and major shopping centers are never built in such areas because they cannot meet the minimum required profitability threshold. Despite the heavy traffic and all your efforts, you will virtually never achieve the desired results.

Railway complexes (or large railway stations) stimulate the development of roadways, which in turn act as a spur to activity in the construction of buildings and other major projects. Shortly after completion of a project of this type, you will see construction of a new roadway. The price of land adjacent to the roadway will rise because numerous companies will choose to locate their headquarters, office complexes and commercial establishments in the area. Moreover, railway stations generate income from the various advertising spaces which they contain, as well as rent from shops within the stations. These revenues are in proportion to the size and the desirability of the station locations.

It is possible to expand the number of train platforms in a large station to accelerate the economic development of this geographic area. Select the station to be expanded. Clicking the left mouse button will cause an information window to appear, including the commands EXPAND and REDUCE (see Figure 32, page 17). Clicking the left mouse button on the EXPAND command will generate the construction of 2 additional platforms. You cannot repeat this operation more than twice.

COSTS

The cost of constructing, expanding or downsizing a station depends on the size of the station, its location, and whether or not you own the land on which the station is built. These costs will be indicated at the bottom of the STATION Menu whenever you point the mouse cursor to the spot you have chosen.

Once your rails have been laid and your stations have been constructed, you must purchase the rolling equipment, allocate the lines, and draw up the necessary transit schedules.

THE PURCHASE TRAIN MENU

C.E.O. gives you access to a catalogue consisting of 30 different passenger train designs from numerous countries, 10 freight trains and 2 types of monorails. They are ranked according to their speed. You can select from among slow trains, medium speed trains and fast trains. Low speed — omnibus; medium speed — rapid train; high speed — express train. (See Figure 33, page 18)

For more details on the trains, consult the Train Catalogue at the end of this manual. (See CATALOGUE OF AVAILABLE TRAINS AND BUSES, page 35)

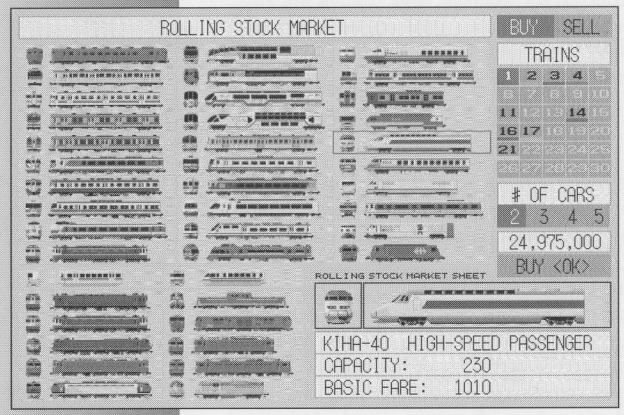

fig. 33

To purchase a train, open the PURCHASE Sub-menu. On the inventory, select a number which is not underlined. It will be immediately assigned to the train you intend to purchase. Click on the different trains and note the various items of information shown (model, capacity, ticket prices, type of train, etc.). Then choose the number of cars you wish to purchase, with 5 being the maximum. Select the PURCHASE command to acquire the train that is most suitable for your needs. The purchase price of the train will be shown in the window situated at the bottom of the PURCHASE Menu. The price will vary depending on which train is selected and the number of cars you want to attach to it.

Note: For each new train purchased you must choose a number that is not already assigned.

Note: To sell a train, make sure it is no longer in operation. (See ARRANGE Menu, page 18)

THE ARRANGE MENU

After you have purchased the train, it will be moved to a depot to await being put into service. To assign a train to a line, you should open the ARRANGE Sub-menu, then select the POSITION command. Then use the inventory to identify, with the proper number, the train to be put into operation.

Choose the line on which you wish to place the selected train by using the SATELLITE Menu or the movement arrows. Finally, click at the precise spot on the line (the block of rails) to place the train.

Note: You cannot place the train on a switch, a slope, or at a stop on a station platform.

Once the train appears on the MAIN MAP, it is marked with an arrow indicating the direction in which it is to move. To reverse the direction, click on the arrow pointing in the opposite direction.

When this operation has been completed, close the ARRANGE Sub-menu and the train will be moved on the map.

THE SCHEDULE MENU (Clockface Icon)

The SCHEDULE Menu becomes increasingly important as your city grows and, along with it, your railway network. You will use this command not only to name your trains and keep track of them, but also to establish departure and arrival times and the routes on which the trains travel.

Note: You can only use the SCHEDULE command for trains in operation. Trains waiting to be assigned (i.e., waiting at the depot) must first be assigned to a route.

fig. 34

THE NAME COMMAND

The NAME command is used in the same way for cities, trains, stations, companies, buses and bus stops in C.E.O..

For trains and buses, call up the SCHEDULE Sub-menu, and choose from the inventory the number of the train or bus to name. Click on the NAME label. An EDIT Menu will appear. Type the new name on the keyboard or select it with the mouse. If you make a spelling error, click the backspace key. If you wish to enter a new name, select the Clear label. Confirm your choice by using the label, and close the menu to resume the game underway. (See Figure 34, page 19)

The railway stations and the bus stops can be renamed the same way. Only the procedure for calling up the EDIT Menu differs. To rename a bus stop or a railway station, select the stop or station on the MAIN MAP when construction has been completed. Then click on the box corresponding to the name of the station to be changed. The EDIT Menu will appear immediately.

Names of cities and companies may be renamed using the GROWTH table. (See the GROWTH Menu, page 32). To call up the EDIT Menu, click on the box corresponding to the name to be modified.

THE SCHEDULE COMMAND

It is essential to understand that each train in operation is programmed by default:
— To stop for one hour in each station on its route.
— To always follow the most direct line when it comes to a switch.

You will find below the elementary instructions you may use to define the schedules and the stops for each of your trains.

In the SCHEDULE Sub-menu, when you change the departure time of a train from the station where it originated, the program automatically adjusts the arrival times (and thus the departure times as well) at the subsequent stations, depending on the speed of the train, the route assigned to it, and the distances it must travel. Since the arrival times depend on the departure times, you must adjust your schedules to achieve an optimum result.

Note: For a route that includes several stops, make sure that the departure schedules of the trains are compatible with their arrival times. For example, if you schedule a train to leave a station at 10 a.m., but it is not due to arrive at that station until 11 a.m., it will remain in the station until 10 a.m. the next day.

How to modify schedules for recently purchased trains (or trains in operation)

To modify train schedules, open the TRAIN & BUS Menu, then select the SCHEDULE Sub-menu. On the list table, choose the number of the train whose schedule you wish to adjust. The name of the train, its type, its speed and its status will be shown in detail. (See Figure 35, page 19)

On the scrolling menu, select the station for which you wish to make the following modifications:

- You can change the arrival platform (but only if several platforms are already completed) (see EXPANDING A RAILWAY: LARGE STATIONS AND SMALL STATIONS, page 17) by using the + and - signs with the PLATFORM command.

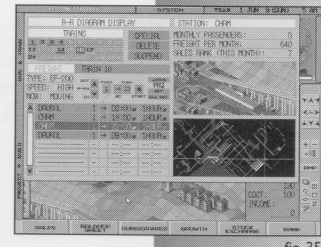
fig. 35

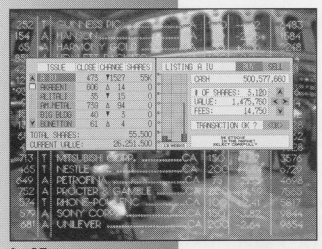

fig. 37

- By clicking on the PASS symbol (see Figure 37, page 20) you can direct the train to pass through this station without stopping.
- If you decide to disregard the "stop in a station for one hour before leaving" rule, use the GO command. (See Figure 37, page 20). Then use the boxes.
- To force a train to reverse direction and return to a station it has already passed through, use the TURN command. (See Figure 37, page 20)
- To define a station as an original departure station, select the START command. (See Figure 37, page 20)

How to adjust a schedule for the purpose of avoiding a station on the route.

To remove a station from the route traveled by a train, click on the name of the station after opening the SCHEDULE Sub-menu, then choose the DELETE command. The new schedule will not take the eliminated station into account. If it is impossible to avoid this station (if it is a point on the route which must be passed), use the PASS command instead.

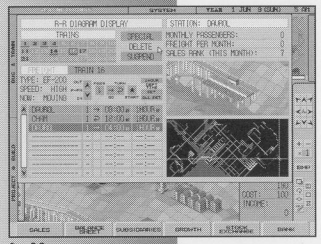

fig. 38

How to adjust a schedule following the addition of a station on the route.

Each time you add a new station on a route, the program will automatically integrate this station into all the routes already operative on the line. As a result, you have only the following 2 choices:

1) The established route suits you: in which case, you do not need to do anything.

2) The established route does not suit you (see Figures 38, 39 and 40, page 20): in which case, begin by using the DELETE command to remove from the schedule the passage through a station provided for by the program. Then move to the station immediately preceding the new station to be integrated. Choose the INSERT command. On the map of the city located in the lower right portion of the window, move the cursor until you are on the station to be inserted. It will appear in the frame located at the top of the map with various items of information (number of passengers, monthly freight carried, and its ranking). Click the left mouse button to confirm. The new station will be inserted in the new schedule as expected.

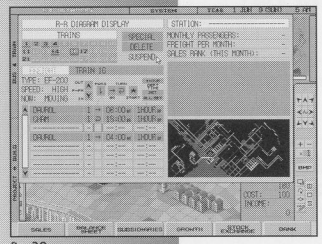

fig. 39

Note: In case you are not satisfied with a route, use the DELETE command on the SCHEDULE Menu and start the operation over again.

How to substitute one station for another on a route.

After you have called up the SCHEDULE Menu, choose the proper number of the train. Position the cursor on the station that is now on the route and, on the map of the city, find the new station. Click the left mouse button, and the substitution will be carried out automatically.

Note: Only stations located on the same route can be switched in this way.

THE SPECIAL COMMAND

If you wish to assign a special schedule to a particular train, choose the SPECIAL command. The program will ask you to choose the months of operation (every month selected will appear in green). This menu is very useful during a school holiday when all the regular trains are already full.

fig. 40

Note: If you assign a special schedule to a train, it will be able to circulate only at the previously selected month(s).

The following menus consist of commands relating to construction and management operations of the road transportation companies, highway construction and management of bus schedules.

To access these menus, select the gray band bearing the BUS & TRAIN label (see Figure 14, page 14), unless you are already using the QUICK Menu. (See QUICK MENU, page 10)

THE ROAD CONST. (CONSTRUCTION) MENU (Roadway Icon)

This menu is used to BUILD and REMOVE segments of roads by using the appropriate commands. You can construct 5 different road configurations (one horizontal, or "at ground level", and 4 inclined, or "elevated").

LENGTHENING/ELIMINATING EXISTING ROADS

In the horizontal configuration, choose the ROAD CONST Sub-menu (see Figure 41, page 21). Click on the BUILD command, then on the HORIZONTAL ROAD icon. On the MAIN MAP select the block (the square of the grid) located immediately to the right of the last segment of road already constructed, and trace your new road segment. Click the left mouse button to confirm.

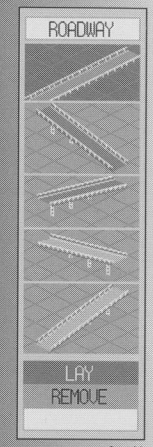

fig. 41

In an inclined configuration, 2 possibilities are offered:

1) If you wish to define an inclined segment (and therefore continue to climb), select the appropriate slope icon from the menu, then define this new segment following the last one already in existence. (See Figure 41.1, page 21)

2) If you have reached the height you want (you do not wish to climb further, but now construct on a flat surface instead), select the construct flat road icon. Then select the last inclined segment block, and draw your line in the same way as for a flat configuration. (See Figures 41.2 and 41.3 page 21)

Note: If you are not satisfied with a road pattern that you are in the process of constructing, click the right mouse button to cancel the operation.

fig. 41.1

To eliminate an existing line, select the REMOVE command on the ROAD Menu, select the block(s) to be eliminated, then click the left mouse button to confirm.

CREATING/ELIMINATING A NEW ROAD

Choose a space free of any construction, and select a starting block. Move the mouse in any direction. You will see a highlighted line in the game area. Click the left mouse button, and the road will appear.

Note: If you are not satisfied with a line you are in the process of drawing, click the right mouse button to cancel the operation.

fig. 41.2

To eliminate a new road, proceed as if you were eliminating an existing road.

BRIDGES

The construction of a bridge on a roadway requires an inclined approach. Open the PROJECT Menu and select the BRIDGE Sub-menu. Select the last road segment that has been constructed, then move the mouse cursor in the direction of the waterway to be crossed. Confirm by clicking the left mouse button. A metallic structure crossing the waterway will appear. (See Figure 18, page 14)

Note: Bridges are only used for crossing waterways. It is impossible to build a bridge over dry land. To do so, you would have to use elevated constructions. Moreover, since bridges are extremely expensive constructions, we cannot overemphasize that you study the surrounding terrain carefully first, in order to keep your spending to a minimum.

fig. 41.3

UNDERGROUND CONSTRUCTION

To construct an underground roadway (and avoid cluttering the surface area), you must use the level display option (see LEVEL INDICATOR, page 12). In C.E.O., you have 3 underground levels available on which you can carry out various projects. You can construct roads on all 3 levels. Use slopes to connect between the different levels. You can also connect the underground road network to the above ground network.

Note: To change from one underground level to another and build on a level surface, align the road segments with the foundations of the constructions on the next higher level.

RESTRICTIONS

In C.E.O., it is impossible to construct a road obliquely.

COSTS

Costs of construction and removal are always indicated on the last line of the operational sub-menu. In the special case of constructing a road, the costs include the purchase of land and the cost of clearing and leveling the land. These costs vary, depending on the elevation level of the road (construction on level ground costs less than elevated constructions). After a road has been removed, you retain ownership of the land on which it was constructed.

THE BUS STOP MENU (Single Sign Icon)

As your railway transportation company develops, you will have to help this activity along by building one or more bus stations. This principle is particularly interesting for short distances (under 15 blocks).

Note: It is essential to construct a bus station before your railway station becomes overrun by heavy traffic.

VARIOUS TYPES OF BUS STATIONS

Click on the PLACE command on the BUS STOP Sub-menu. You have the possibility of building 2 types of bus stations.

- Small bus stations
- Large bus stations

Each bus station can be built in 4 different configurations, depending on the available road. Apart from the impossibility of constructing a small underground bus station, the essential difference between these 2 types of stations lies in their cost. A small bus station is more suitable for a suburban area than for a large city or adjacent villages. On the other hand, large bus stations are more suitable for developing the heart of a major city.

Select the type of bus station you wish to construct. Then point the mouse cursor to the spot you have chosen on the MAIN MAP. A white rectangle will appear in a bright highlight on the game area. Click the left mouse button. The building will be immediately constructed.

To remove a bus station, select the REMOVE command on the ROAD Menu. Then select the station to be removed. The building will disappear. However, you still retain ownership of the land.

RESTRICTIONS

- A bus station cannot be built on a curve.
- A bus station cannot be built on a slope.
- A bus station cannot be built on an elevation.
- A bus station can only be built if you have already started the construction of a road.

Underground Stations

To construct an underground bus station, proceed in the same way as for the construction of an above ground bus station (the same restrictions apply).

Note: It is impossible to construct a small bus station underground.

Large Bus Stations Or Small Bus Stations

Even though both big and small bus stations can be useful in the transportation of passengers, they differ in their impact on the local economy. Big bus stations are able to handle much heavier flows of travelers than small bus stations. The more substantial the flow of travelers, the stronger the stimulus provided to the growth of the area. Therefore, it is advisable to replace any small bus stations near fast-growth areas, with bus stations of a larger size as soon as your financial resources make that possible.

Costs

Construction costs for a bus station depends on its size, the location, and whether or not you own the land on which it is to be built. The costs will be indicated at the bottom of the menu when you point the mouse cursor to the spot of your choice. (See Figure 41.4, page 23)

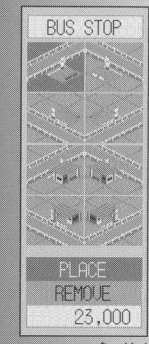

fig. 41.4

Once the roads and the bus stations have been constructed you must purchase buses, allocate routes, and devise transportation schedules.

THE PURCHASE MENU

C.E.O. gives you access to a catalogue offering 10 different bus models used for passenger transportation. They are listed in order of their capacity and the basic price of a ticket. (See Figure 42, page 23)

To purchase a bus, call up the PURCHASE Menu. On the tracking table numbered from 1 to 20, select a box containing a number that is not already allocated. It will be immediately assigned to the bus that you are going to purchase. Click on the different buses, and note the various items of information available (model, capacity, ticket price, type of bus, etc.). Select the PURCHASE command. You have just purchased a bus. The purchase price of the bus will be displayed in the window located at the bottom of the PURCHASE Menu. It will vary, depending on the bus chosen.

Note: For each new bus, it is necessary to choose a number that has not been already assigned.

Note: To sell a bus make sure that it is no longer in operation. (See ARRANGE Menu, page 18)

THE ARRANGE MENU

Once a bus has been acquired, it is put in a depot before beginning operation. In order to assign a bus to a specific line, you must open the ARRANGE Sub-menu, then select the Position command. You can then use the reference table in order to identify the bus to be placed into service by its number.

Select the line to which you want to assign the selected bus using the SATELLITE Menu or the movement keys. Then click the exact spot of the route where you want the bus to be placed.

Note: The bus cannot be placed on a slope or at a bus station stop.

Once the bus appears on the MAIN MAP, an arrow above it will indicate the direction in which it will move. To reverse this direction, click the direction arrow pointing the opposite way.

Once this operation has been accomplished, close the DISPOSE Sub-menu. The vehicle will immediately begin to move on the map.

THE SCHEDULE MENU (Clockface Icon)

This menu has the same functioning specifications as the SCHEDULE Menu for trains. (See SCHEDULE Menu, page 18)

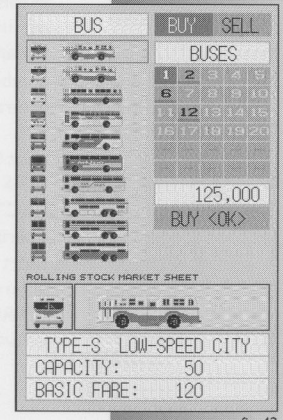

fig. 42

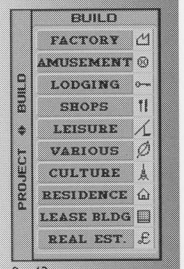

fig. 43

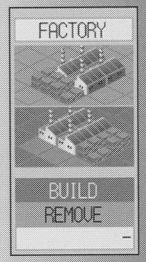

fig. 44

fig. 45


fig. 46.1


fig. 46.2

PRODUCTION AND WAREHOUSING OF RAW MATERIALS

The development of a city (and consequently the development of your business enterprise) is accomplished only by the acquisition and wise use of raw materials. They can be used to erect various buildings from which you will obtain part of your income.

Raw materials are produced by factories or they come from outside the MAIN MAP. They are brought in by freight trains and ships. They are then placed in warehouse areas located next to stations or production areas before being used for construction or transported to another warehouse area. (See REAL EST., page 26)

Note: It is important to establish warehouse areas for raw materials as soon as a station or factory is built. It is also advisable to use the land located behind a newly built railway station for a warehouse area. By doing this, you will not be penalized if this station is enlarged as a result of the growth of the neighboring development axis.

BUILD AND PROJECT

This menu includes commands associated with the construction of other kinds of companies as well as with land acquisition.

THE BUILD MENU

This menu is opened by clicking the left mouse button on the word BUILD (clicking the left mouse button on the word BUILD will close the menu).

The BUILD Menu offers a choice of developing a whole series of related companies (see Figure 43, page 24). Select the type of company that you want to build and check its cost at its location on the MAIN MAP. All buildings constructed in this way belong to your group with the exception of parks, churches and schools that are "donations" made by the A-IV Group in order to promote the development of a particular area.

To build a company you must check first that you have enough raw materials nearby. To remove an existing company, select the REMOVE command at the bottom of the sub-menu of the appropriate icon. Click the left mouse button on the company to be removed. The building has now been erased.

If you want to build a company on land that does not belong to you, you must acquire the land before undertaking any construction. This operation is performed automatically and is reflected in the construction costs. The price of land varies according to the location and the economic situation. The situation can arise where the land you wish to build on is not for sale. In this case, you must wait or find a nearby lot where you can establish your company.

Some constructions require a very large surface and consequently can only be built on a small number of areas on the MAIN MAP. You must be careful to find these spots and check for all natural obstacles that you might encounter there.

Note: It is highly recommended to buy land before the area gets developed. (See REAL EST, page 26.)

FACTORY (Polygon Icon)
There are 2 different types of factories which are used to accumulate and store (for a very short time period) raw materials. Besides the size difference, and consequently the cost difference, factories have exactly the same functions (see PRODUCTION AND WAREHOUSING OF RAW MATERIALS, page 24). (See Figure 44, page 24)

AMUSEMENT (Baseball Icon)
These companies specialize in leisure activities such as attraction parks, stadiums and aquariums, which have been found to be essential to the development of modern urban areas. (See Figure 45, page 24)

Note: Aquariums can only be built on water close to the shore (see Figures 46.1 and 46.2, page 24).

LODGING (Key Icon)
This sub-menu is used to build hotels and motels according to the area's development size. (See Figure 47, page 25)

SHOPS (Fork And Knife Icon)
These commercial establishments, shopping centers and restaurants, are essential to the development of the retail sector. Furthermore, during the construction of a business area, it is important to consider the restaurant sector. Eating establishments can be profitable very quickly according to their locations. (See Figure 48, page 25)

LEISURE (Antenna Icon)
You have the choice of building golf courses, ski areas and marinas. These are the so-called "elite" sports because they attract a relatively high-income clientele who, once they "trust the quality and standard of the premises", will not be afraid to spend considerable amounts of money to use your establishments. (See Figure 49, page 25)

Note: Marinas can only be built on water close to the shore.

Note: To construct a ski area, you must choose a slope with the same inclination angle as the one represented by the SKI RESORT icon. You can link several ski areas to each other in order to create a large ski area.

VARIOUS (Leaf Icon)
This sub-menu is used to improve a sector of the map by building parks, walking areas (forests), churches and schools. This is useful if you want to improve the "standard" of a neighborhood and build luxury residences and collect higher rents. Don't hesitate to provide the residents with parks and private schools: they will undoubtedly show their gratitude. (See Figure 50, page 25)

Note: Anything built from the choices of this sub-menu will not increase your income directly. These establishments are considered to be non-profit organizations which you do not own. On the other hand, they improve the urban environment and stimulate growth.

CULTURE (Tower Icon)
This sub-menu lets you invest in the cultural and artistic sector by building various works (monuments) and exhibition halls that give the city a unique look. These buildings are sources of income. They can be used for cultural events and they attract large numbers of visitors - particularly during the summer season. (See Figure 51, page 26)

RESIDENCE (House Icon)
You can build apartments, houses and villas. You will obtain income by renting to people who wish to establish themselves in the area for a long period of time. (See Figure 52, page 26)

Note: Constructing these various types of housing units is crucial for the development of a city. It is advisable to invest rapidly in this area when the scenario arises.

LEASE BLDG. (Building Icon)
The logic in this menu is identical to the one in the preceding menu. After providing housing to the residents, you can provide office space to companies. (See Figure 53, page 26)

fig. 47

fig. 48

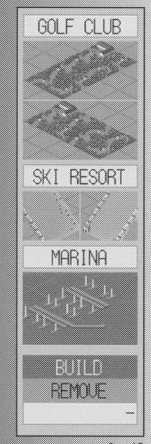

fig. 49

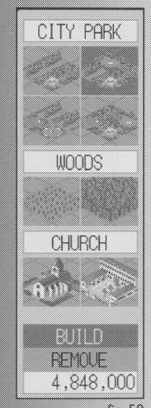

fig. 50

fig. 51

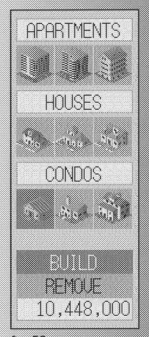

fig. 52

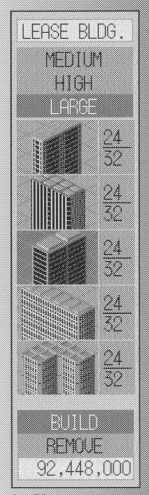

fig. 53

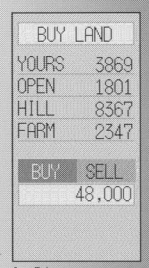

fig. 54

There are 5 different types of buildings. They are defined as a function of their size: Average = 24 stories, Tall = 28 stories, Large = 32 stories.

Note: Unlike most other buildings, office buildings are erected in several stages (each stage is composed of a group of 4 floors). You can only receive rental income after the building has been entirely constructed. You will see a crane operating at the top of the building during the entire construction phase. Once this crane disappears, the building is ready for occupancy.

If you want to vary the height of the building to be erected, click the figure located on the right of the LEASE BLDG. icon.

REAL EST. (Dollar Sign Icon)
This command is used to purchase or sell land. The sub-menu categorizes 4 kinds of information: the surface area of land you already own (YOURS), the total area for sale (OPEN), the areas in relief (where, by definition, nothing can be built except for ski areas - HILL), and agricultural areas (green squares on the MAIN MAP). (See Figure 54, page 26)

There are different types of land: land that is owned (brown blocks of color on the MAIN MAP), available land (green, brown or grayish-white blocks of color on the MAIN MAP, depending on the season), and occupied land (little houses on the MAIN MAP).

You can buy bare land. In cases where the land has been built up (farms or farmland), you must first purchase the buildings on it. The price indicated at the bottom of the menu automatically takes into account these eventual purchases as well as the cost of clearing the land.

To acquire a piece of land, click on the BUY command of the REAL EST. Sub-menu, then select the total surface area you wish to purchase on the MAIN MAP. Click the left mouse button to execute the command. This selected area becomes dark brown. To sell a piece of land select the SELL command and then proceed in the same way as for a purchase. You will see the value on the YOURS line decrease and the one on the OPEN line increase.

Note: You must use this command to create the areas for warehousing raw materials near stations or factories. (See PRODUCTION AND WAREHOUSING OF RAW MATERIALS, page 24)

PROJECT

Big projects will display your visionary side and will have a lasting impact on the A-IV Group's activities in every city. They are projects requiring considerable budgets and time frames. To open the PROJECT Menu, click on the word PROJECT. (See Figure 55, page 27)

Note: The PROJECT and BUILD Menus can hide each other.

There are 2 types of projects available in C.E.O.:

BIG PROJECT
This menu is used to build tunnels, bridges, airports and other large projects necessary for the development of a large metropolis.

Tunnel (Black Circle With Line Icon)
There are 2 types of tunnels that can be built: road tunnels and railway tunnels. They are used to add a section to a road or a railroad, and to cross mountains. (See Figure 56, page 27)

Note: It is not possible to build a tunnel underground (under level 0). The program considers that you have to build a tunnel before laying an underground railway.

To construct a tunnel, open the PROJECT Menu, then select the TUNNEL Sub-menu. Click on BUILD and select the type of tunnel to be built (railway or road). Use the level indicator (see Level Indicator, page 12) to begin construction at the appropriate level. Click on the starting block (entrance to the tunnel) and move the mouse in the direction of the tunnel to be built. A straight highlighted line will be displayed. Confirm your choice by clicking the left mouse button. The tunnel will appear automatically.

You remove a tunnel in the same manner as you would an ordinary railway.

Note: You can remove a tunnel only if it is out of order (not connected to the railway system).

Bridge (Bridge Icon)
Just as for tunnels, there are 2 types of bridges in C.E.O.: road bridges and railway bridges. The construction procedure is described in Bridges (see BRIDGES, page 15). (See Figure 57, page 27)

To remove a bridge from the MAIN MAP, proceed as for a construction, but first select the REMOVE command.

Airport (Airport Icon)
An airport is the most important construction (in terms of surface area) in the C.E.O. game. You need at least 128 available blocks to build one and you can only build one airport per map. (See Figure 58, page 27)

Note: Once an airport is built it can be removed, but it cannot be bought or sold.

To build an airport, once the PROJECT and AIRPORT Menus are open, click on the BUILD command. Select the site and check that you have sufficient funds for the project. A left mouse click confirms your selection after which the building is displayed.

To remove an airport from the MAIN MAP, proceed as for a construction, but first select the REMOVE command.

Port (Ship Icon)
Just as for the aquarium and the marina, the port has special construction requirements. It must be built on the water and be next to the shore. A port stimulates the local economy and generates several jobs. Furthermore, it is where you can receive raw materials coming from other production centers located outside the main map. (See Figure 59, page 27)

Note: You may not build more than 5 ports per map.

To build a port, once the PROJECT and PORT Menus are open, click on the BUILD command. Select the site and check that you have sufficient funds for the project. A left mouse click confirms your selection after which the building is displayed.

Note: It is not possible to sell a port.

To remove a port from the main map, proceed as for a construction, but first select the REMOVE command.

Monorail (Monorail Icon)
Unlike the procedure for other types of trains, the construction of a monorail line must start from a station. (See Figure 60, page 28). A few other requirements must also be met:

1) The station must be a large elevated station. (See Elevated Stations, page 17)

2) The monorail must be assigned to Platform No. 5. To accomplish this you have to build a large elevated station and expand it twice. Start the monorail on the fifth rail track.

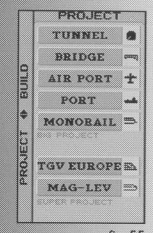

fig. 55

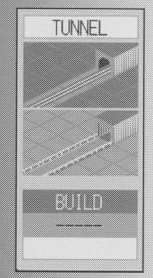

fig. 56

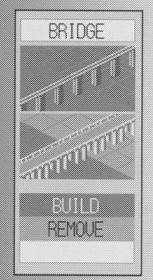

fig. 57

fig. 58

fig. 59

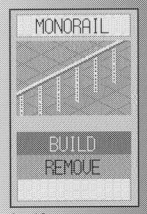

fig. 60

Once these requirements have been met, you must also adhere to the following conditions:

1) The tracks can only be built at one level (the one of the starting station).

2) You cannot create any switches.

Once these requirements and conditions have been met, you must possess a large sum of money to maintain them. Therefore, it is advisable to contemplate the construction of a monorail once the development of a city is advanced and your operations are profitable.

The process of constructing a monorail is as follows:

Once the PROJECT and AIRPORT Menus are open, click on the BUILD command. Select Track No. 5 of an elevated station (if necessary, enlarge your station). Move the mouse in the direction you wish the monorail to be built. A straight highlighted line will be displayed. Confirm your choice by clicking the left mouse button and the line will be built automatically. You can build monorail tracks on either land or water. To end a monorail line, you must have a 5-track station. In order for the monorail to run properly, you have to replace the rail tracks with monorail tracks at the stations.

Then just as for the purchase of an ordinary train, you must purchase one of the 2 trains suited to the new type of railway and place the train on the tracks.

To remove a monorail from the main map, proceed as for a construction, but first select the REMOVE command.

SUPER PROJECT

The construction of super projects is not only expensive, but the return on the investment is far from being immediate, even if they do have numerous positive effects on the local economy. (See Figure 60.1, page 28)

There are 2 available Super Projects:

Starlight (Train #1 Icon)
To build the STARLIGHT, you must open the PROJECT and STARLIGHT Menus. A reduced view of the MAIN MAP and an estimated table describing the balance sheet will be displayed. (See Figure 60.2, page 29)

These special tracks can only be built in a straight line. The program will let you choose the direction in which to build the tracks. The tracks of the STARLIGHT cannot be built on high relief areas. Similarly, they cannot go through any skyscrapers they meet on their route. If the line were to cross one of these two obstacles, construction would be halted immediately.

The construction budget is largely a function of the length of the line, the infrastructures required to carry it out, and the purchase price of the land. You will encounter very high land prices if you choose to build the line in the center, or near the center, of a city.

If you are not satisfied with the placement of the railway, or if you are unhappy with the amount in the budget, move the mouse cursor to a new place on the map. The program will automatically calculate the new budget.

Once you are totally satisfied with your project, click on the ACCEPT command and construction will begin. Contrary to most constructions, the STARLIGHT line is not finished immediately.

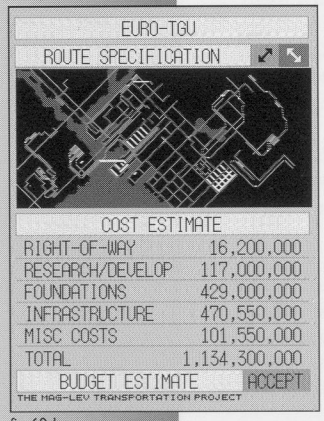

fig. 60.1

Note: Once construction work on the STARLIGHT has started, you can no longer remove the tracks nor cancel the work.

Note: If one of your competitors places a building on the path of the tracks during the construction period, construction will stop automatically.

Mag-Lev (Train #2 Icon)
The construction of the MAG-LEV requires a much more substantial budget than the STARLIGHT. Accomplishing this project will only be feasible in certain cases. This must theoretically become one of the mandatory goals of your mission; one which will leave its mark in the history of the city forever. (See Figure 60.2, page 29)

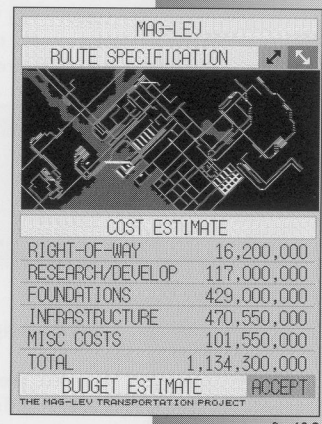

fig. 60.2

To build the MAG-LEV line, you must open the PROJECT and MAG-LEV Menus. A reduced scale view of the MAIN MAP and an estimated table describing the budget will be displayed.

These special tracks can only be built in a straight line. The program will let you choose the direction in which to build the tracks. The tracks of the MAG-LEV cannot be built on high relief areas. Similarly, they cannot go through any skyscrapers they meet on the route. If the line were to cross one of these 2 obstacles, construction would be stopped immediately.

The construction budget is largely a function of the length of the line, the infrastructures required to carry it out, and the purchase price of the lands. You will encounter very high land prices if you choose to build the line in the center, or near the center, of a city.

If you are not satisfied with the placement of the railway, or if you are unhappy with the amount in the budget, move the mouse cursor to a new place on the map. The program will automatically calculate the new budget. Once you are totally satisfied with your project, click on the ACCEPT command and construction will begin. Contrary to most constructions, the MAG-LEV train line is built in stages.

Note: Once construction work on the MAG-LEV train has started, you can no longer remove the tracks nor cancel the work.

Note: If one of your competitors places a building on the path of the tracks during the construction period, construction will be halted immediately.

MENUS LOCATED AT THE BOTTOM OF THE SCREEN

These various menus provide access to certain financial information concerning the A-IV Group. They are described in detail in the following paragraphs:

THE SALES MENU

Once this window is open, certain financial data concerning the A-IV Group is displayed. The displayed table is presented in the simplified form of the balance sheet described below. (See Figure 61, page 30)

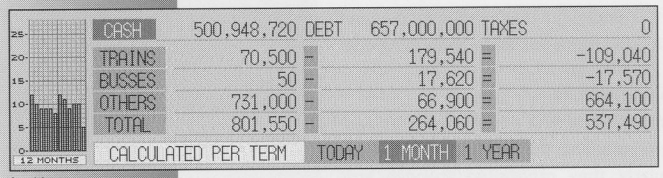

fig. 61

This window displays and updates continuously the figures for the sales and profits accumulated by your company (day, month, year). Notice that opening this menu does not stop the game's clock.

Furthermore, the window is displayed in 3 different sizes. The size increases with each mouse click (progressively covering all the main map).

Unlike the other menus, this one is only completely closed at the fourth left mouse button click on the word SALES.

THE FIRST MOUSE CLICK

The first mouse click shows the total amount of cash that is available for you to take on the various construction projects and purchases. If this figure becomes negative, it means that your company is in bankruptcy and the game will end.

The figure placed next to the word DEBT indicates the total amount of bank loans. You must repay these and the related interest at the rates and on the dates specified at the time the loans were made. At the expiration date, the program will automatically charge the correct amount to your company's account.

The figure placed next to the word TAXES indicates the total amount of taxes to be paid. In C.E.O., the various tax categories have been simplified and placed into 2 different groups:

Taxes on the A-IV Group income (Company Income Taxes)
Taxes on land owned by the A-IV Group (Property Tax)

An estimated amount will be indicated on March 1 of the current year. The total amount will be charged to the group's bank account in June.

Note: Be sure to have enough cash to pay your yearly taxes and your bank loans.

THE SECOND MOUSE CLICK

This displays a whole series of data calculated in real time related to the railway company and its subsidiaries. You will be informed immediately of sales affected, costs incurred and the net profit before taxes (if there is a profit). Furthermore, you will have a first look at any sectors which should receive your attention immediately.

THE THIRD MOUSE CLICK

A command that lets you change the calculation basis to day, month or year. According to your selection, the graph located on the left will change. Red bars indicate losses (by the day, month, or year); black bars show profits.

REPORT

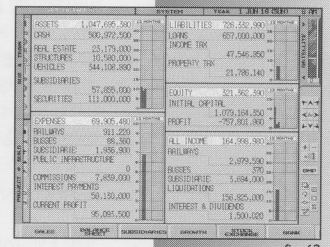
fig. 62

This menu displays, in a more complete form, the various financial characteristics of your group. The fiscal year of the A-IV Group begins April 1 of the current year and runs until March 31 of the following year. Opening this menu stops the game clock. (See Figure 62, page 31)

This window is divided into 5 sub-groups: assets, expenses, liabilities, equity and income. Each total figure is represented as a graph summarizing trends in the different items over the last 12 months.

ASSETS

This menu consists of the following items:

CASH: The total amount of cash and equivalent held by the A-IV Group.

LAND: The total value of land owned by the Group.

STRUCTURES: The total book value of buildings relating to transportation operations (railway and road); it does not include the trains and buses themselves.

VEHICLES: The total book value of the trains and buses owned by the A-IV Group.

SUBSIDIARIES: The total book value of all subsidiaries owned by the A-IV Group.

SECURITIES: The total book value of equity interests held by the A-IV Group.

EXPENSES

RAILWAYS: The total cost relating to railway operations, including station maintenance costs, train operation costs and depreciation.

BUSES: The total cost relating to bus operations, including bus station maintenance costs, operating costs and depreciation.

SUBSIDIARIES: The total operating cost of the group's subsidiaries, including procurement.

PUBLIC INFRASTRUCTURE: The total cost of building and maintaining public buildings (see VARIOUS, page 25) plus various contributions to operating costs of schools and churches.

FEES: The total commissions paid for stock exchange transactions and for transactions carried out by subsidiaries.

INTEREST PAYMENTS: The total amount of interest paid on loans.

CURRENT PROFIT: Difference between total INCOMES and total EXPENSES.

LIABILITIES

LOANS: The total amount borrowed from banks.

INCOME TAX: The total amount of taxes due on profits generated since the start of the fiscal year.

MISCELLANEOUS TAXES: Total estimated tax on assets.

EQUITY

INITIAL CAPITAL: The total original amount of the company's share capital.

PROFIT: The total profit retained since the company was created. The formula for PROFIT

is ASSETS minus LIABILITIES minus CAPITAL.

INCOME

RAILWAYS: The total income of the railroad transportation sector.

BUSES: Total income of the road transportation sector.

SUBSIDIARIES: Total income of the subsidiaries of the A-IV Group during the fiscal year.

SALES: Total amount of capital gains generated on divestment of securities, subsidiaries and land.

INTEREST & DIVIDENDS: Interest received from the bank where the group has an interest bearing account and any dividends earned from securities holdings.

THE SUBSIDIARIES MENU

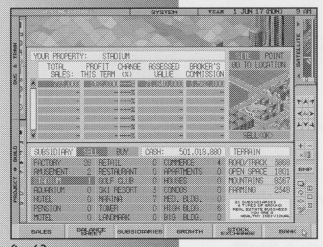

fig. 63

This menu is used to sell your subsidiaries to your competitors and to buy companies being divested by them. The game clock stops when this menu is open. To sell a subsidiary (after you have opened the Subsidiaries Menu), click on the SELL command. Choose the one you want to put on the market from the list of subsidiaries. If the subsidiary you wish to sell is not visible, use the cursor on the scroll-down menu until it is displayed. In case of any doubts, the viewing window lets you locate (on the map) the subsidiary to be divested, and to see it, or to go there directly, in order to remove any possible doubts you might have. (See Figure 63, page 32)

The total sales of this subsidiary, the profit for the current quarter, the growth rate in income, as well as the commission to be paid to the selling organization are all listed. To confirm the sale, click on OK.

To buy a company belonging to one of your competitors, open the SUBSIDIARIES Menu (just as for a sale), but click on the BUY command. The list of companies available for purchase will be displayed.

Note: Not all items are for sale. There may be a case where you cannot purchase a company because the competitor who owns it wishes to retain it.

Once you have identified the subsidiary, click on OK to confirm your purchase.

You must pay a commission whenever you buy or sell a company. This amount varies depending on the cyclical situation and of the actual value of the company. The commission is deducted automatically during the financial transaction between you and your competitors. It is added to the purchase price in case of a purchase, and subtracted from the sale price in case of a sale.

Note: You may not own more than 512 subsidiaries at any given time.

THE GROWTH MENU

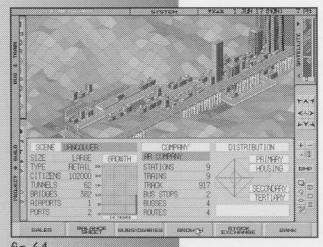

fig. 64

This menu displays a number of statistical items relating to the development of the scenario that you are in the process of playing. Opening this menu causes the game clock to stop temporarily. (See Figure 64, page 32)

In this menu you can rename the city in which you are playing, or the railroad company that you manage. (See NAME command, page 19)

SIZE: The program evaluates and updates the major trends of the city. Five

categories are evaluated: the large city, the medium sized city, the small city, the village and the hamlet. This evaluation is useful for you to orient your tasks in order to achieve your goal.

TYPE: The city type is important because it lets you, if necessary, adjust your constructions in order to reach your goals as expediently as possible. Also, the program analyzes your actions and provides you with the following results: commercially oriented city, industrially oriented city, tourist oriented city, agriculturally oriented city or residentially oriented city. These criteria change according to constructions that are created on the map.

CITIZENS: Displays the total population of the city.

TUNNELS: Indicates the number of tunnels built on the map.

BRIDGES: Updates the number of bridges built on the map.

AIRPORTS: Gives the number of operational airports found on the map.

SEAPORTS: Gives the number of operational seaports found on the map.

GROWTH: Indicates any change in the number of inhabitants of a city during the last 18 years.

STATIONS: Displays the number of railway stations in service.

TRAINS: Indicates the number of trains your company owns, including those in the depot.

TRACK: Displays the total length of railway tracks laid out on the map.

BUS STOPS: Shows the number of bus stops in service on the map.

BUSES: Indicates the number of buses your company owns, including those in the depot.

ROUTES: Displays the number of different routes covered by your buses.

DISTRIBUTION: Describes graphically the development levels of the various sectors on the map.

THE STOCK EXCHANGE MENU

You use this menu to buy and sell shares. You must use a broker who will take your orders and will act in your name on the exchange. The operating hours of the various exchanges are from 9 a.m. to 5 p.m. from Monday through Friday. The Stock Exchange cannot be reached during weekends and holidays. The game clock stops when this menu is opened. (See Figure 65, page 33)

There are 36 companies listed on the Stock Exchange. For more details about these companies, see COMPANIES LISTED ON THE STOCK EXCHANGE, pages 38-39.

For each transaction you make, a commission is charged to you. It is added to the purchase price and subtracted from the sale price of your stocks.

Dividends (if there are any) are paid to you once a year on the first of July. They vary according to the performance of the various listed companies.

In order to make the best possible investment, you must obtain the following information:

CLOSE: Price of the stock at the close of the stock exchange the previous day.

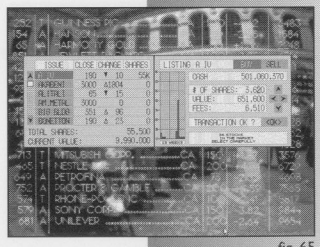

fig. 65

CHANGE: The difference between the current price of the stock and the closing value of the preceding week. A white triangle next to this value indicates that the price has risen. A black upside down triangle indicates that the price has dropped.

SHARES: Indicate the total number of stocks owned by the A-IV Group.

CURRENT VALUE: Displays the total amount of shares you own during the day.

STOCK VALUE GRAPH: Shows a diagram of the stock value fluctuations during the last 13 weeks.

To purchase shares, select the BUY command, check the listed companies, find their closing price, the change rate and the number of shares you already own.

Once you have selected the company (if necessary, use the scroll bar until you find the stock you are looking for), the graph displays the variations in the price of the stock. You will be told the number of shares that are being sold this day, and that you can purchase.

To display the number of shares to purchase, click on "+" or "-" to change the figures and on INC/DEC to increase or decrease the number.

The box located just under the one that displays the number of available stocks describes the purchase price as well as the exchange commission to be paid to your broker. Check the amount in the group's bank account and click on the confirm command.

To sell shares, proceed in the same way as for purchasing. The only difference comes in selecting the SELL command instead of the BUY command.

THE BANK MENU

This menu is extremely helpful when you want to begin borrowing. Offices are open from 9 a.m. to 5 p.m. Monday through Friday. The bank is not accessible during weekends and holidays. Opening this menu stops the game clock. (See Figure 66, page 34)

The list of loans already made is indicated on the left part of this window along with the repayment dates, interest rates and monthly payments. Payments are automatically deducted from the A-IV Group's bank account. If the situation arises where you do not have sufficient funds, your company will be declared bankrupt and the game will stop.

Note: You cannot repay a debt before it is due, just as you cannot push back a payment date.

Payments are made up of principal and interest. Interest rates fluctuate as a function of the length of the loan and the economic cyclical situation.

The maximum limit of a loan cannot exceed 70% of your assets. The more your company grows, the more assets it has and the amount of the maximum loan will be higher.

Note: A-IV Group funds kept at the bank yield a monthly interest rate of 0.1%.

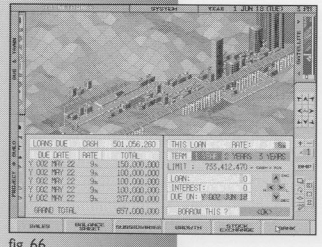

fig. 66

To borrow money, open the BANK Menu, and use the arrows to select the amount you want to borrow. The minimum amount that can be borrowed is $10.00.

The interest rate applied will vary according to the length of the loan. This will be displayed with the payment date and the amount of the monthly payments. If you agree with the amounts and payment conditions, click on OK, then close this menu.

CATALOGUE OF AVAILABLE TRAINS AND BUSES

THE TRAIN CATALOGUE (Concentric Circles "+" Icon)

KIHA 40 (see Figure 67): A diesel omnibus used on local lines. There are various types adapted to different climates.

201 (see Figure 68): An express, new generation suburban train. It has its own electrical generator along with its battery system so it can run in the event of an electrical power failure.

415 (see Figure 69): An express suburban train for medium distance routes. It can run either on alternating current or on direct current lines.

205 (see Figure 70): A rapid stainless steel suburban train. It has ultra-modern equipment and is remarkably comfortable.

211 (see Figure 71): A new rapid stainless steel suburban train. It is very light and requires a lot of maintenance. It is not made for long routes.

KIHA 82 (see Figure 72): A super express diesel omnibus. The cars composing it are separate.

113 (see Figure 73): A suburban train that is well suited for medium distance travel. It is more comfortable than most of its predecessors.

117 (see Figure 74): A suburban train that is well suited for short and medium distances. It can be easily recognized by its double headlights.

381 (see Figure 75): An aluminum rapid passenger train. It is used for short distances especially on curved tracks where it can travel rapidly.

EF 6524 (see Figure 76): A rapid passenger train derived from EF 65, especially adapted to night travel.

251 (see Figure 77): A super express passenger train linking the center of town to the suburban stations. It has a unique look with large curved windows and it is powered by direct current.

253 (see Figure 78): A super express which is powered by direct current. It is used to link the center of town to the airports. It has a distinct shape which makes it very recognizable.

AR 3 (see Figure 79): A super express suited for long routes. Its distinct shape makes it very comfortable and provides it with low air resistance.

AR 4 (see Figure 80): The most recent model of the AR series. Constructed with reinforced plastic, this is the lightest train of all. It also has an upper bridge.

SEI 101 (see Figure 81): A suburban train that links the suburbs to the center of town. It is yellow and has a conductor's booth with a distinct shape.

SEI 5000 (see Figure 82): A train used mainly for routes traveling to ski resorts. It has large straight windows and a red line that runs the length of the cars.

KI 30000 (see Figure 83): A super express adapted to all routes.

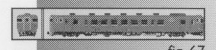

fig. 67

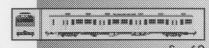

fig. 68

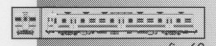

fig. 69

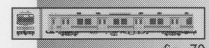

fig. 70

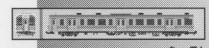

fig. 71

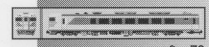

fig. 72

fig. 73

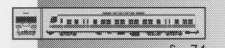

fig. 74

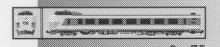

fig. 75

fig. 76

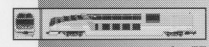

fig. 77

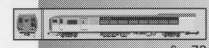

fig. 78

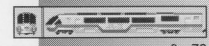

fig. 79

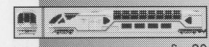

fig. 80

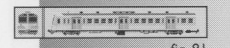

fig. 81

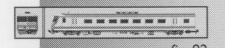

fig. 82

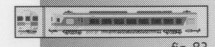

fig. 83

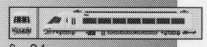
fig. 84

KI 21000 (see Figure 84): A super express linking cities. Its shape is similar to that of European super express trains. It is completely automated, and does not use a railway man.

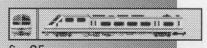
fig. 85

MEI 8800 (see Figure 85): A super express with all imaginable luxury and comfort. It has a panoramic car.


fig. 86

MEI 7000 (see Figure 86): A rapid red colored passenger train. It has panoramic windows and a compartment located above the conductor's booth.

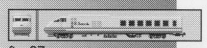
fig. 87

T LINER (see Figure 87): A high speed American train used to link cities together. It works with a gas turbine with a design originating with the RTG.

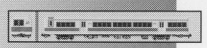
fig. 88

MTA (see Figure 88): The fastest American suburban train which provides a rapid link from the center of town to the suburbs.

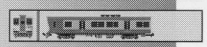
fig. 89

313 (see Figure 89): An English express train linking the center of town to the suburbs. It can be driven either by alternating current or direct current. It has a distinctive design as well as its own color scheme.

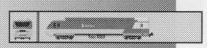
fig. 90

HST (see Figure 90): A rapid train of English origin which is driven by a diesel engine and pulls Mark III passenger cars.


fig. 91

TGV-A (see Figure 91): A French high-speed train. It has 2 engines running on alternating current and it runs on its own tracks.

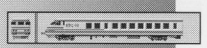
fig. 92

RTG (see Figure 92): A French train that runs with a gas turbine which was once used in the aeronautics industry. The American T LINER derives much of its design from the RTG.

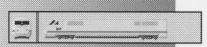
fig. 93

ICE (see Figure 93): A rapid German train. It has an engine at both ends and it uses an "inverted control" with an asynchronous tri-phase electric engine.

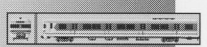
fig. 94

ET 420 (see Figure 94): A German express train that provides links between large cities.

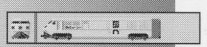
fig. 95

LRC (see Figure 95): A rapid Canadian train that uses a 12-cylinder diesel engine that works using the "compulsive pendulum" method.

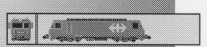
fig. 96

HGe4/4 (see Figure 96): A train of Swiss origin particularly suited to variable elevation routes.

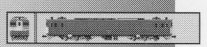
fig. 97

EF 62 (see Figure 97): An electrical freight train. It was designed to climb even the steepest slopes and it has only one car.

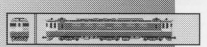
fig. 98

EF 65 (see Figure 98): A standard freight train often used in cities because it is adapted to flat routes, long distances and suburbs.

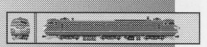
fig. 99

EF 66 (see Figure 99): A super powerful locomotive that can pull cars weighing more than 1,000 tons at a speed of 100 km/hour. It is usually used as a high speed train for transportation of goods on long distances.


fig. 100

EF 81 (see Figure 100): An engine dedicated to the transportation of goods. It has been specially designed for long distance night travel.

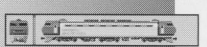
fig. 101

EF 200 (see Figure 101): The last electrical engine model developed with leading technology. This freight train is equipped with a computerized control system and a power generator coupled to a 1,000 kilowatt motor.

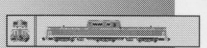
fig. 102

DD 51 (see Figure 102): A freight train for non-electrified lines.

DF 200 (see Figure 103): A new locomotive dedicated to freight transportation. It has been designed for non-electrified routes and is supplied with a 12-cylinder diesel engine.

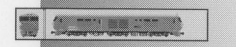
fig. 103

ED 75 (see Figure 104): An engine that uses alternating current. It is used mainly for transportation of goods but also as a night passenger train.

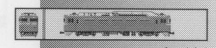
fig. 104

ED 76 (see Figure 105): This engine can be used both as a passenger train and as a freight train.

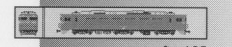
fig. 105

GP 7 (see Figure 106): An American diesel engine that can reach up to 1500 Hp.

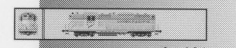
fig. 106

MONO-A (see Figure 107): A standard monorail train. It provides a large number of seats at the expense of passenger comfort.

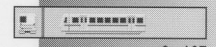
fig. 107

MONO-B (see Figure 108): A monorail which is better than the MONO-A both for speed and comfort.

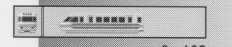
fig. 108

THE BUS CATALOGUE (Concentric Circles "-" Icon)

TYPE-S (see Figure 109): An economical bus typically used for suburban routes.

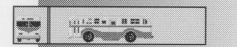
fig. 109

TYPE-M (see Figure 110): Rated higher than the TYPE-S for speed and capacity, it is used for regular bus routes in suburban areas.


fig. 110

H-DECK 1 (see Figure 111): A multi-level bus for urban routes.

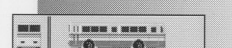
fig. 111

H-DECK 2 (see Figure 112): A multi-level bus suited for short tourist routes. It is a good compromise between performance and cost.

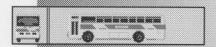
fig. 112

H-DECK 3 (see Figure 113): A multi-level bus which is an improvement on the H-DECK 2. It features a lounge in the back.


fig. 113

H-DECK 4 (see Figure 114): The best bus for long tours. These buses are often used by airline companies because of their baggage storage capacities.


fig. 114

SH-DECK (see Figure 115): A bus with a comfortable maximum speed. Classified in the category of semi-elevated bridges, it has a very large baggage storage area and reclining seats.

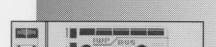
fig. 115

W-DECK 1 (see Figure 116): A bus with an upper bridge totally dedicated to tourism. It has a much higher seat capacity than any other bus.


fig. 116

W-DECK 2 (see Figure 117): A double bridge with fewer seats but provides more passenger comfort. The upper bridge is used as a lounge.

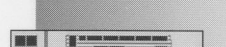
fig. 117

W-DECK 3 (see Figure 118): The best bus in terms of performance, speed, capacity and comfort.

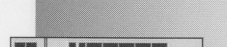
fig. 118

COMPANIES LISTED ON THE STOCK EXCHANGE

A-IV: The company that you are managing.

Akabeni: A company engaged in trading and investing in Asia.

Alitali: A well-known airline.

AM Metal: A company that makes metal components used in the manufacture of cars, trains and boats.

Big Bldg.: An international real estate company; owner of a number of large office blocks.

B M S: A company with operations in the food sector.

Bonetton: One of the leading companies in the textile sector.

Boyer: An industrial company in the chemicals and fertilizer sector.

C M N: An international consortium with operations in television and data transfer.

Cola Soda: The world's number one producer of carbonated beverages.

Compoq: The world leader in microcomputers.

DDBP: An advertising agency with world-wide operations.

Entendo: The leading company in the electronic games sector.

Eurosteel: One of the five largest steel companies, with diversified interests in electronic equipment.

Fadex: A large transportation company.

Germ. Gas: The supplier of natural gas to the majority of cities.

Genelec: A pioneering company in the nuclear field.

Goldmon: A large real estate company specializing in the management of apartment blocks.

High Sky: A company specializing in the construction of skyscrapers and stadiums.

Houigues: A construction company, specializing in individual homes and apartments.

I D F: An electric equipment company with a wide range of operations, ranging from the manufacture of household appliances to the construction of nuclear power stations.

Igloo TD: An international trading company.

Kyonera: A company that develops household products, using recycled products.

Lavis: One of the world's largest clothing manufacturers.

Mac Donnell: A company specializing in making aircraft and boats.

Macrosoft: The world leader in software.

Morlin: A leading company in the construction of factories and luxury apartments.

Nostle: A multi-national agro-food company.

OBM: A leading company in the private and public computer market.

PDK: A company producing various magnetic media, including cassette tapes and computer disks.

Respol: A fuel-production company.

Rolls Ross: A company specializing in the manufacture of aircraft engines.

Sany: A company specializing in home electronics appliances.

Steel Co.: A manufacturer of steel beams used in construction.

Totoya: One of the leading car manufacturers.

U T T: The world leader in information technology.

TECHNICAL SUPPORT

If you are having problems getting the game to function properly, you can call Technical Support between 9:00 a.m. and 5:00 p.m. (Pacific Standard Time) at 310-576-1885. There will be late-breaking information available on the phone system itself. If our staff is busy you can leave a message and one of our technicians will call you back. You may also reach us through our technical support BBS at 310-576-1820 using standard settings or by FAX at 310-576-1889.

HINTS AND TIPS

You may call the C.E.O. Central Net (900-740-4230) to request game hints, or you may mail your written hint request to I•Motion, Inc., Attn: C.E.O. Game Hints, 1341 Ocean Avenue, Box 417, Santa Monica, CA 90401, or FAX it to us at 310-576-1889.

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Note: The cost of the 900 number call is $0.85 per minute. You must be at least 18 to call.

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