

# Ports Of Call Deluxe 3D 2024

the tramp shipping economy and simulation game, Rev. 1.40

© 1994-2024 Rolf-Dieter Klein, Martin Ulrich,  
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*(generated by KI using ChatGpt 4- DALL-E)*

'Ports Of Call' has tradition. The game first appeared in 1986 in the USA for the Amiga. Later, it was adapted for DOS on the PC. In 1994, 'Ports Of Call 2.0™' was released, a version for Windows in nine languages. It has successfully proven itself on the market for many years, with several versions appearing online, such as POCXXL, POCSIM3D, POCSIM3DII. In 2006, Ports Of Call Classic Edition was released, a derivative of the POCXXL version focusing on 2D economy.

Ports Of Call Deluxe 3D 2024 is the successor to the Deluxe 2008 version, which is now being further developed. The release is now on STEAM.

The Deluxe series is the first complete implementation of the game in 3D, which includes not only the ship simulator but also the economic part in 3D. It is based on the UR-Amiga version with a few additions.

**Have Fun.**  
**Rolf-Dieter Klein**

**Text translated using ChatGPT 3.5 from german to english.**



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## 1 System prerequisites

You will need a computer with Windows 7 / 8 / 10 / 11 and Direct X 9.0c, 512 MB RAM, a Pentium or AMD processor with at least 2 GHz, a Windows-compatible sound card, and a graphics card such as NVIDIA 5800 or newer, or ATI x900 or newer, supporting the Direct X 9.0c Shader Standard with at least 256 MB texture memory.

## 2 Installation

The installation is quite simple via STEAM. In principle, LINUX is also possible as an operating system, but PROTON needs to be activated, and support is still being optimized. Currently, after scaling the virtual screen, you must briefly switch to full screen and then back, or simply use full screen. For Windows as well, full-screen display is recommended for efficiency reasons.

## 3 Support

Updates, patches, and further information can be found on the STEAM page of Ports Of Call. There is also a dedicated developer page and group.

For general discussion among Ports Of Call fans for all versions, there is a forum at <http://www.rdkleinform.de>. Here, you can also receive tips and assistance from other users.

Enjoy! Your Ports Of Call Team

# Ports Of Call Deluxe 3D 2024

The navigation simulation game

Ports of Call ©1994-2024 Rolf-Dieter Klein and Martin Ulrich

## 4 About the game

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The tramp navigation:

The goods traffic by sea is regulated by international agreements and contracts between single countries. This one becomes the goods to be transported between two countries, the so-called cargo load emerge, run transported to approximately 80% of ships also under the flags of the countries in question. The remaining 20% of the cargo load emerge are free and ships which drive under arbitrary flags can apply around this cargo load. These ships are the so-called tramp ships which is usually fitted out on this to transport, most different goods. About this area of the ocean shipping it is into ports of call.

From time to time the different one whether a tramp shipowner makes profits, on the one hand hangs of the laws the regulations and the subsidies of its country quite simple and simply of supply and demand. If e.g. a good coffee harvest has given, the coffee prices drop and because a lot of coffee has to be moved, the freight rates increase. If many ship owners rush at the good business with the coffee transport now, the supply of shipping space increases and the freight rates sink again. At extremely unfavourable yields some ship owners even are, i.e., forced to establish your ships to put the ships out of operation.

In this case one can sell the ships badly since the ship prices drop (supply and demand) and it is worthwhile not to sail the ships, the yields do not cost covering since are. A part of the fixed costs for the ship, like maintenance and debt service (interest), runs of course far. One can purchase favourably good second-hand ships in such times.

Also except for the economic conditions but the life can be exciting quite beautifully on a tramp ship. . and this is not a "sailor's yarn" now

#### 4.1 The game goal

---

Each player establishes a shipping company. They utilize their starting capital of \$4 million to purchase ships from the shipbroker. They select cargoes and destinations from a changing selection. They set sail, choose an economic speed, navigate through cliffs, shoals, icebergs, avoid impending collisions, rescue shipwrecked individuals, and dock at the destination port. After unloading the cargo, they receive the agreed-upon sum, refuel, repair the ship if necessary, find new lucrative cargo, buy additional ships, and/or pay off their mortgages, striving to achieve a better corporate result than their competitors.

The game strategies are freely selectable. A swashbuckler who makes a quick buck with cheap ships and drives their opponents into bankruptcy through manipulation of freight rates follows a risky course, but can win just as well as the cautious player who carefully builds a solidly financed company and stays one ship length ahead of competitors through the superior speed of their high-tech fleet, snatching the most profitable cargoes from under their noses.

However, without a good captain who knows how to safely navigate ships through the stormy seas, any strategy is doomed to failure. In Captain's mode, ships respond to rudder movements and speed instructions as in reality. It is advisable, especially for beginners, not to overwhelm themselves with Captain's mode. Larger ships are even more sluggish here than small ones, requiring even more finesse from the captain.

Ship movement on the high seas occurs with great acceleration. However, the captain must determine the correct speed. Fuel consumption depends on the time at sea and the weather. The most economically viable sailing speed depends on fuel prices and freight rates, hence on the economy. Captain's decisions have a significant impact on the economic success of the shipping company. However, their influence extends even further. The creditworthiness of a company depends heavily on its societal status. And a shipping company whose captain is unable to rescue shipwrecked individuals or even damages the ship during every other docking maneuver has a lower status than a shipping company with successful captains.

But of course, the decisions of the ship owners also influence the status. High status increases creditworthiness. The player can more easily obtain more credit, cushioning mistakes or expanding their fleet faster and thus outperforming their competitors.

The more a player knows about international shipping, the better their chances of success. Because all the game's data come from actual developments in shipping: the fluctuations and range of freight rates, bunker costs, port fees, ship costs, and especially ship operating costs. Ship operating costs include expenses for taxes, management, crew costs, security measures, etc., and these costs vary from country to country. These general costs are automatically and imperceptibly debited from each ship at regular intervals, minus the subsidies, tax breaks, and the like usual in the individual flag states.

Ship prices are the same for all shipowners. However, since in reality, different countries subsidize shipbuilding differently, a corresponding compensation amount is included in the general basic costs.

So, we wish fair winds and following seas, and always a hand's breadth of water under the keel!

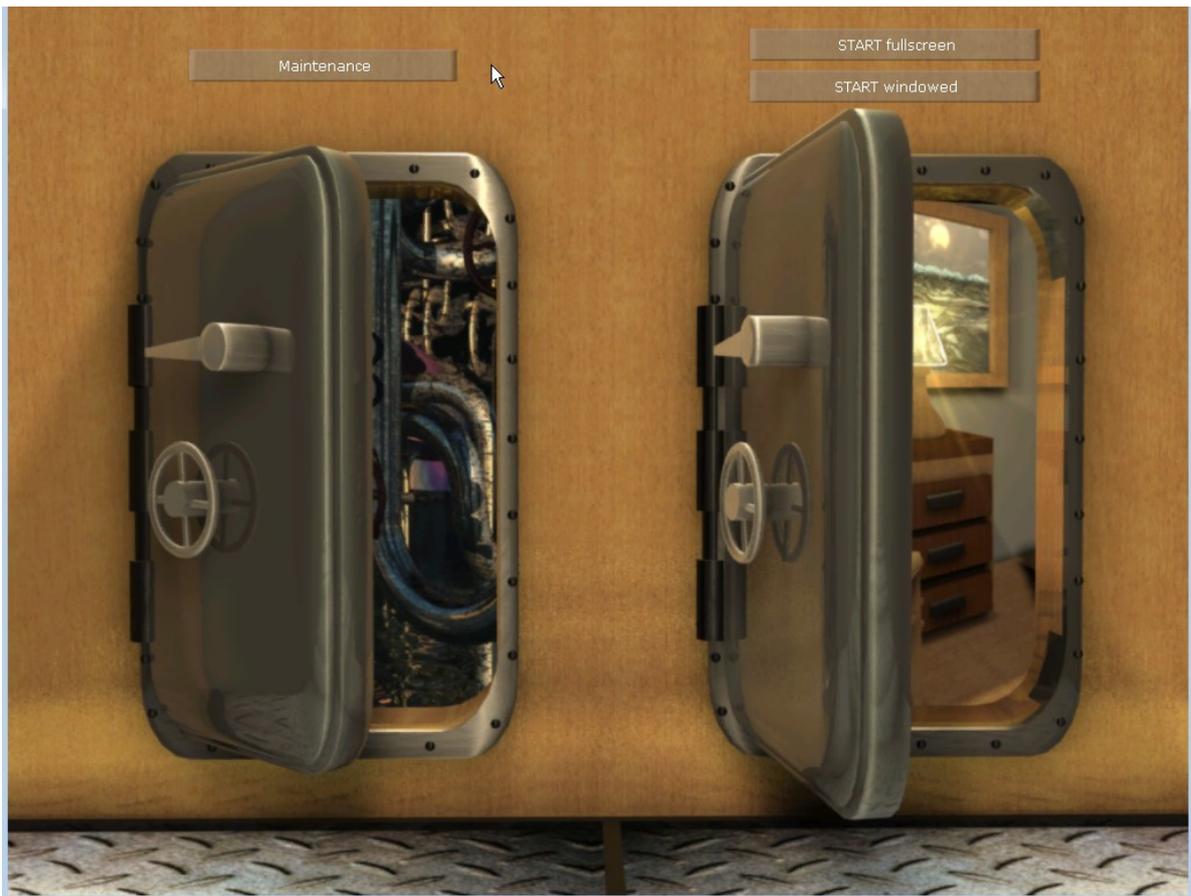
The winner is...

When the game ends, the ranking appears. The winner is the one with the highest status. In case of the same status, possession, thus wealth, decides

#### 4.2 :To start Port Of Call

---

Start via the STEAM selection menu. Then you will receive a language selection, after which the game starts. After launching and a brief loading screen of the program, you will see the following screen:



If you want to change basic settings, which is usually not necessary, navigate through the left bulkhead, click 'Maintenance.' There you can adjust settings for your graphics card to either increase quality or speed. You can also switch the game to pure economic simulation mode there. Additionally, there is a link to the homepage with current information on updates, etc.

**IMPORTANT:** Usually, a controller is automatically detected and configured. For multiple controllers and other types, please perform the mapping in the controller menu! Once the controller is detected, keyboard control of the throttle is no longer needed.

To go directly to the game, navigate through the right bulkhead. Click 'START Full Screen.' You should generally avoid using windowed mode as the game may stutter (Windows only runs smoothly in full-screen mode for games). If you mainly want to play the economic part, windowed mode is also fine. You can switch between full-screen and windowed mode at any time in the game using ALT-ENTER.

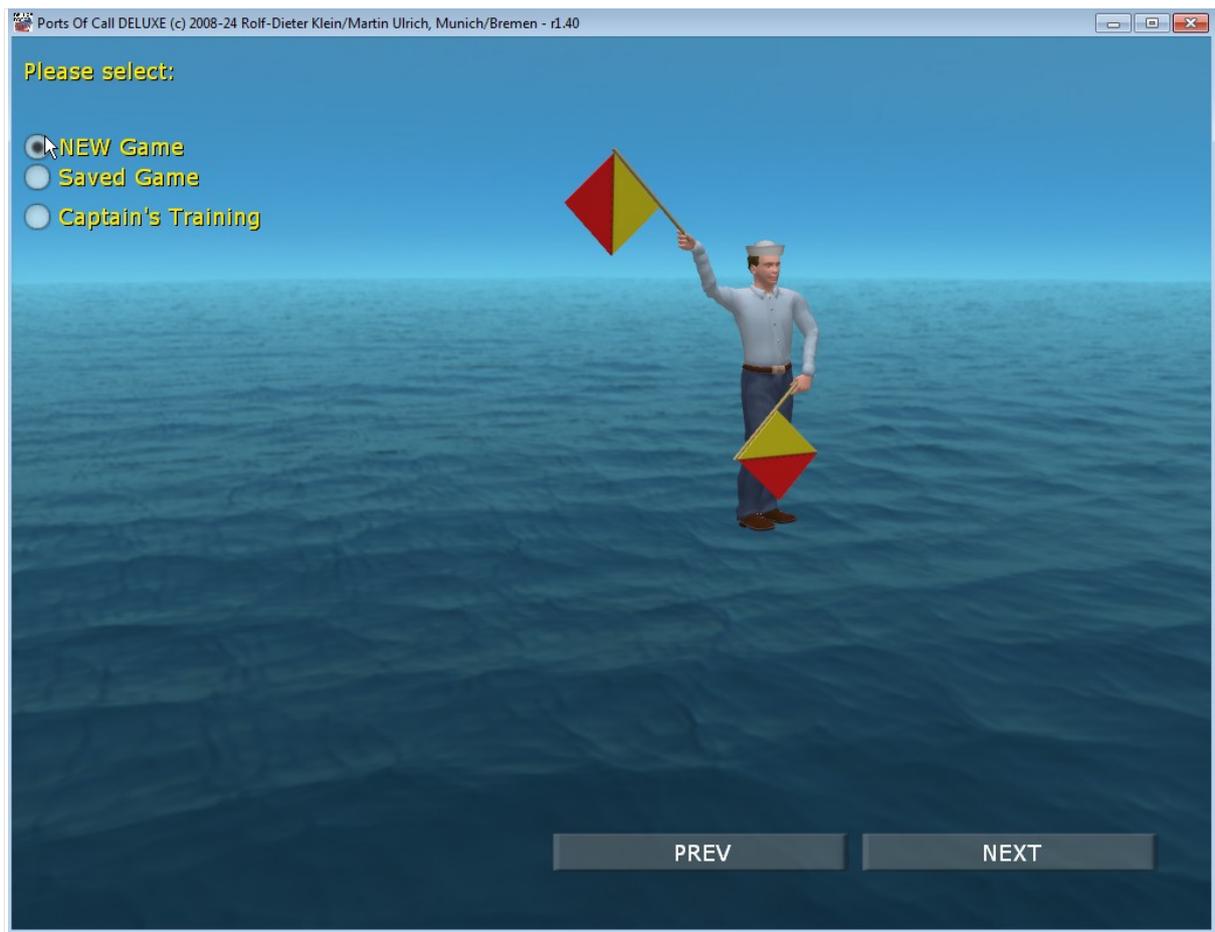
In the following screen, you set the difficulty level. Cadet is the easiest, and Captain is the most difficult. The settings influence various aspects of the game. In Cadet mode, the economic gameplay is much easier, with more profits from goods, and the ship behavior is more arcade-like. The ships have reduced inertia and are slightly faster. In Captain mode, managing the economy is very difficult, and ships are harder to control due to their realistic behavior. You might need up to 20 minutes to dock in a harbor (but this is rewarded with a status point...). Braking distances, as with real ships, are also simulated, as well as effects like torque from propeller movement (in a later update, also current, wind, etc.).

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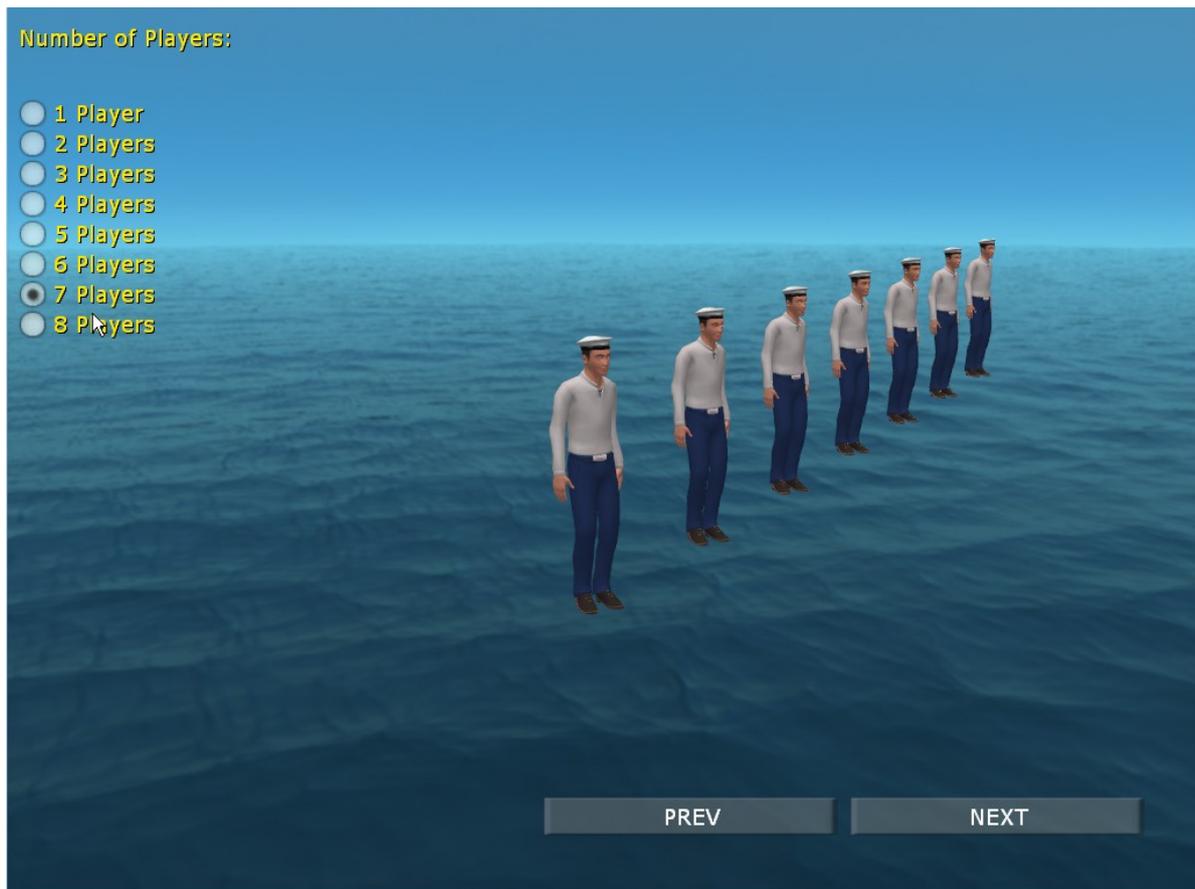


Next, you'll be asked: 'New Game?' or 'Continue Old Game?' or 'Captain's Training.' If you want to practice driving different ships, go to 'Captain's Training.' This is the ship simulator part of the game. If you want to start your first or a new game, choose 'New Game?'

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Then you'll be asked how many players are participating. Select from 1 to 8 players.

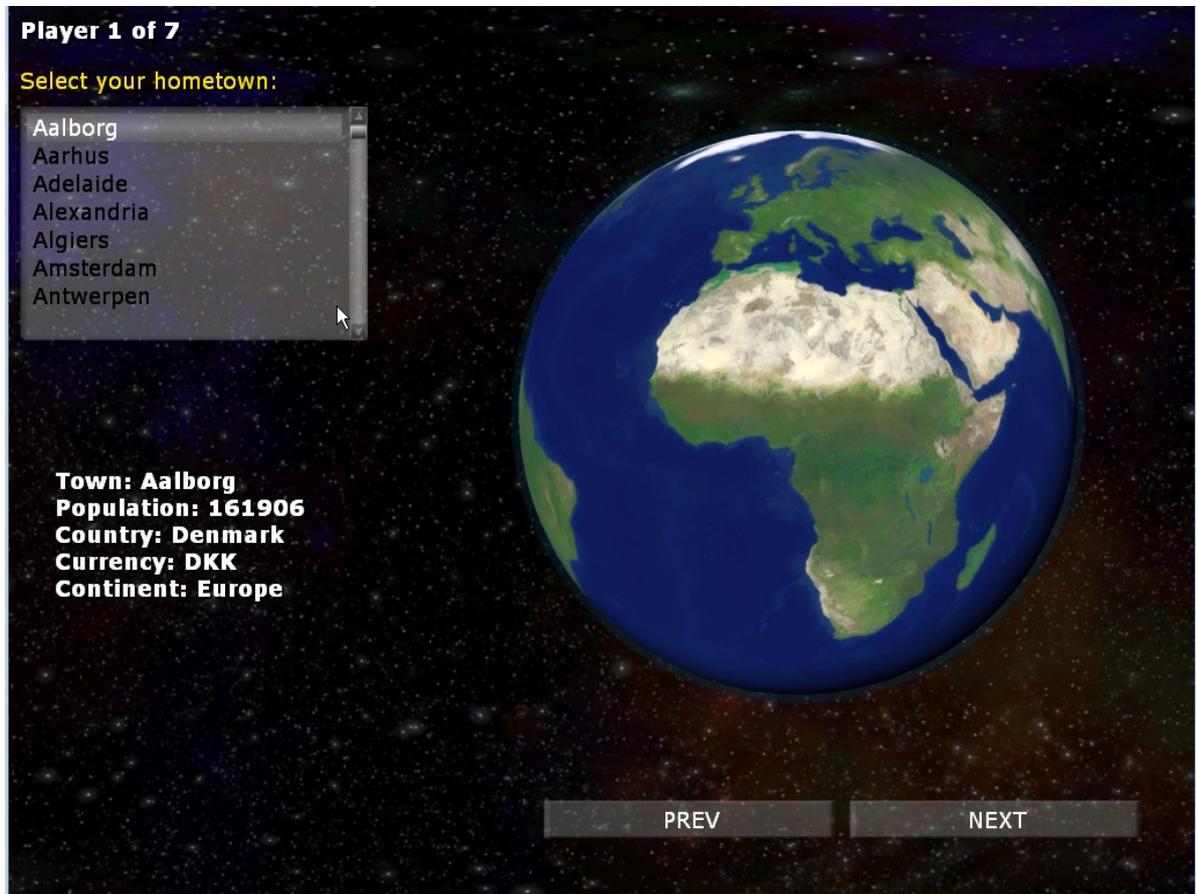


**Developer comment:**

Ports Of Call has always been a game for multiple players. We were determined to create a game where the player doesn't sit lonely at the screen. We envisioned the ideal situation: Four or more players sitting with a crate of cola or another lightly sparkling drink at the computer, competing in maritime and economic expertise, and in their nautical skill. Stories are told of such sessions lasting into the deep night. We like that. **Currently only on one PC, taking turns.** A network multiuser version is on the todo update list for a future update.

### 4.3 Home port

Select your home port from the list on the left above.



Select your home port from the list on the left above. But caution: With the port you also select the respective country. Also different costs arise under the flag of different countries. There are flag of convenience countries and more expensive countries. This is connected with the occupation rules, the safety and working time ordinances and taxes of the individual countries. We hardly debit the different costs noticeably in the background of the game. If you do not make any profit, this could be due to wrong ship owner decisions or to this that you are registered in the wrong country. Simply try it out or look it up.

**Developer comment:**

## Ports Of Call Deluxe 3D 2024 - STEAM edition

In the simulator, the ports are designed differently. Some of them are worth visiting, such as New York, Sydney, Gythion, or Las Palmas. There are special challenges at ports with locks, such as Antwerp, Bremerhaven, Panama, Veracruz, or Zeebrugge. Additional detailed ports will be added over the course of updates, add-ons, etc. Some of the training ports are already designed as well.



#### 4.4 Company Establishment

Now, establish your company. Enter the captain's name and the name of your shipping company in the founding application. Click on the name fields and enter the name. Then choose your office. Attention: The more ships you have, the more employees you need to manage them. Accordingly, your office must be larger or smaller. At the beginning, a smaller office is sufficient. You can always move if you want to expand your shipping company. Choose an office color. This will be your company color. This makes it easier to distinguish the information intended for you from that for other players. Try to choose different colors to make things easier. You are now a shipowner. Each player must go through this procedure.

**Player 1 of 7** **Money: 4,000,000.00 USD**

**Register your shipping company:**

**Name:**  
Travel

**Company:**  
Paradise

**Select an office:**

- Casual Office
- Casual Office 2
- Casual Office 3
- Greece Office
- Harbour Office
- Modern Office
- Modern Office2

**Choose an office color:**

equipment costs:	95,550.00 USD
security:	7,056.00 USD
rental fee/month:	8,820.00 USD
fixed cost/month:	66,885.00 USD
employee:	39
employee/month:	76,440.00 USD
max ships:	38

**PREV** **NEXT**

## 5 Mono and Stereo

You need a red/cyan glasses as available in the market. However, for optimal effect, a few settings are required. Use the key combination Alt and S to switch between mono and stereo. With Alt and Z, you access the menu for adjusting the stereo effects and also close it. It's advisable to do this on all camera perspectives of the ship simulator. Then, use Alt and M to return to the maintenance menu and click 'Save settings in INI'. This will save your stereo settings.

The settings you should adjust are under the slider labeled 'eye' for your interocular distance. Under 'at', set your eye target point (vanishing point). And 'sc' changes the 3D zero plane. Eye and at together adjust the depth effect. Just try a bit until it looks good, then save it in the INI file under Maintenance (Alt-M).

Examples:



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Image in the office after ALT-S with the default (standard) settings. You can also put on the glasses provided with the manual to see the effect.



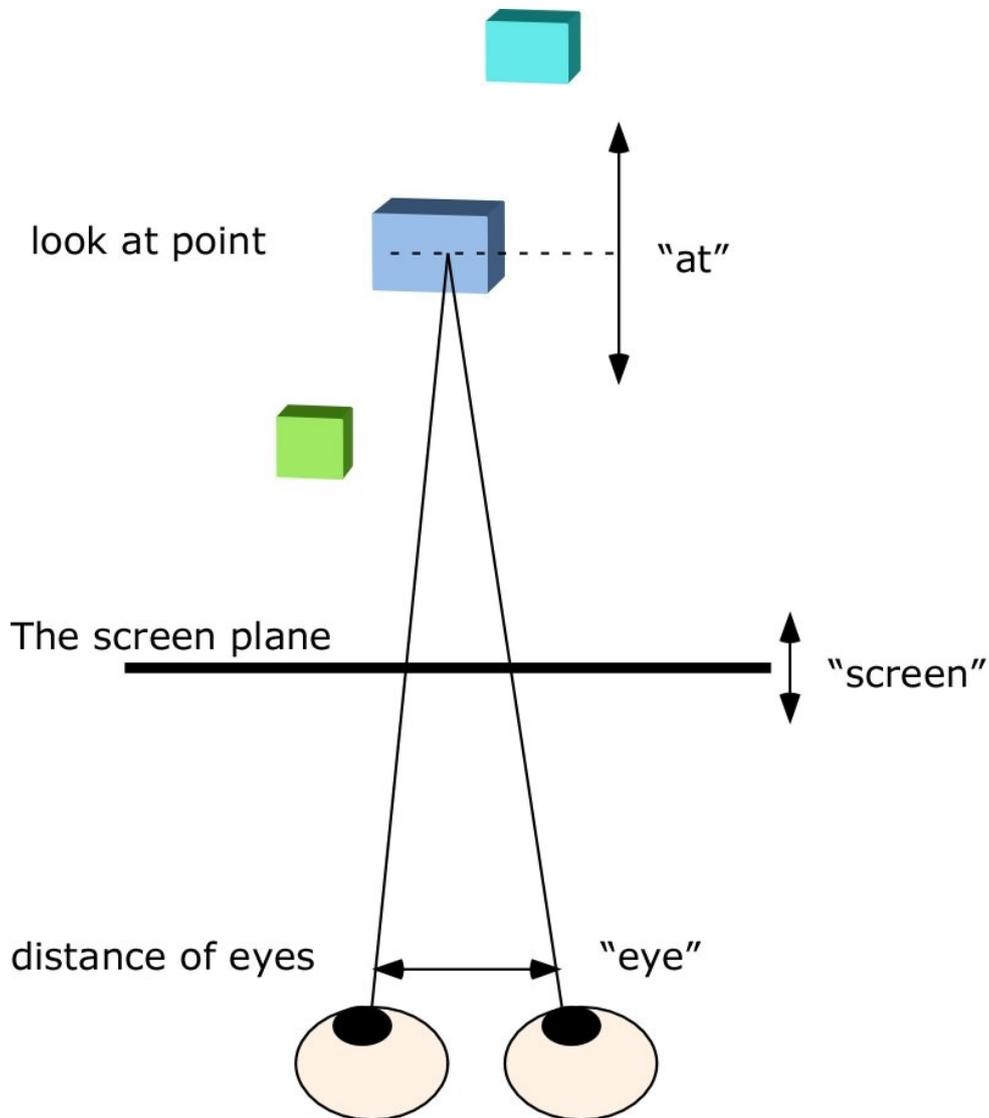
ALT-Z displays the settings for 'eye', which is the interocular distance, 'at', the target point, and 'sc', the screen.



Here, the settings have been significantly altered to increase the depth. This involves increasing the interocular distance, but also adjusting the focus (at). In order for the scene to start at the screen and then extend backwards, the 'sc' slider is also adjusted. It essentially shifts the entire image in the depth of the room.

Here is a diagram to explain the settings. With 'at', you practically shift the focal point, while 'eye' changes the interocular distance. Increasing the interocular distance expands the depth range. Especially with landscapes, it can be important to choose a larger interocular distance for a good stereo impression. The screen can be shifted using 'sc' or Screen. This also moves it into the scene. This defines the screen plane, so objects are precisely on the screen (such as buttons, which are always placed there).

As an example, here is the scene pushed forward out of the screen. For the office, this is not a good setting because the buttons remain in the screen plane for usability. 'Office' is entered next to the selection box, as many scenes are grouped together, which can be adjusted individually.



## 6 Keyboard shortcuts

### 6.1 Common

F1	Help text on/off only usable in the Ship Simulator.
F5	Programstart from the Maintenance menu.
F6	Displays system information in the simulator and framerate (only if ALT-X is active).
ALT-S	Toggle between RED/CYAN stereo and vice versa.
ALT-Z	Display stereo menu with sliders for adjustment.
ALT-W	Enable weather menu. This function is linked to the ALT-X key and displays sliders for weather settings (fog, rain, snow, clouds, etc.). Only effective in the Simulation menu.
ALT-X	<ul style="list-style-type: none"> <li>• Toggle additional text help and camera selection on/off during simulation.</li> <li>• Release mouse or use mouse for camera movement (toggle).</li> <li>• If the mouse is not displayed (indicating it's used for camera rotation), you can use ALT-X to display (or hide) it again.</li> </ul>
ALT-N	ALT-N = new game (possibly without confirmation). Save the current game beforehand!!
ALT-M	ALT-M = return to the admin/maintenance menu. You also have the option to return from there. However, system settings should be changed with caution during gameplay, as the graphics card may request a new loading process, which could take some time.
ALT-Enter	Toggle fullscreen mode/windowed mode.

### 6.2 Navigation

Enter	YES / Program start can often be used for confirmation (also the key 0).
ESC / BACK	NO / Cancel (Gamepad button 1).
TAB	Up (menu selection in the selection menus at the beginning) (Gamepad button 3).
SHIFT TAB	Down (menu selection in the selection menus) (Gamepad button 4).

**6.3 During shipsimulation**

F3	Display map
F6	Display technical data, e.g., refresh rate. If it's too low, optimize settings in the Admin Menu, e.g., turn off reflections and shadows, as well as the radar display, which consumes processing power. (Here ALT-X has additional meaning)
ALT-P	PAUSE in the ship simulator for screen dumps. This also freezes the water.
Arrow ↑	(Up arrow) = Increase speed
Arrow ↓	(Down arrow) = Decrease speed
END	Speed control to 0
POS (home)	All engines stop (speed and thrusters)
LEFT ←	Starboard rudder
RIGHT →	Backboard rudder
SHIFT LEFT	Activate port bow thruster (only if the ship is equipped)
SHIFT LEFT	Activate starboard bow thruster (only if the ship is equipped)
STRG LEFT	Activate port stern thruster (only if the ship is equipped)
STRG RIGHT	Activate starboard stern thruster (only if the ship is equipped)
END	Quick stop, all to zero (speed control, rudder, thruster control) – These buttons only work with pure keyboard operation. The gamepad takes over this function.
SHIFT END	Full STOP - speed control to zero
POS	Rudder in neutral position
SHIFT POS	Stern thruster off
STRG POS	Bow thruster off
ADD +	Zoom in radar
SUB -	Zoom out radar
PAGE ↑	Sun position (note: we use a circular path for this, so the sun can be positioned higher than it would be geographically possible. However, the simulator always sets the sun's height corresponding to the geographical position upon start.)
PAGE ↓	Sun position

INSERT	Sun altitude
DELTE	Sun azimuth

#### 6.4 Kamerasteuerung

1 Num	"Reverse" - Camera - View of the ship from bow towards stern
2 Num	"Follow" - Camera with view from stern towards midship Verfolgung“
3 Num	"Reverse" - Camera - View of the ship from bow towards stern
4 Num	"Bridge height" - Camera view from the bridge towards bow
5 Num	"Inside bridge" - Camera from inside the bridge towards bow
6 Num	"Bridge height" - Camera view from the bridge towards bow
7 Num	"Port quarter" - Camera from the port quarter - if the mouse is activated with ALT-X, you can also move the camera along the hull starting from the bow towards the stern. Both directions of the mouse are activated. It takes some practice.
8 Num	"Bridge height" - Camera view from the bridge towards bow
9 Num	"Starboard quarter" - Camera from the starboard quarter - if the mouse is activated with ALT-X, you can also move the camera along the hull starting from the bow towards the stern. Both directions of the mouse are activated. It takes some practice.
0 Num	Berth Camera shows from the berth (general target) towards the ship

On the gamepad, you can switch between cameras using the buttons '3' and '4'. When pressing the '3' button, all extra cameras are also cycled through, whereas with '4', they are not. In the Captain's Trainer container port, several such cameras are defined. You can also switch between cameras using the mouse. The left mouse button cycles through all cameras, while the right mouse button does not. This mode is only active when the mouse cursor is turned off using ALT-X.

### 6.5 Gamepad/Joystick

<Key 1>	YES / OK / Program start from main menu
< Key 2>	NO/QUIT
< Key 3>	Up arrow / Cycle through cameras with extra cameras included
< Key 4>	Down arrow / Cycle through cameras
< Key 5>	Activate ship horn
< Key 6>	Zoom in scene while key is pressed

Example of button assignments for a Cordless Rumblepad: (The mapping may be slightly different for other gamepads)



## 7 The world simulation display

After all players have put down their name, the world simulation display appears. This is the main picture of the game, the starting point of all actions.



### 7.1 The world simulation display

The simulation display shows the respective positions of all ships of all ship owners involved over a map of the world. You must buy a ship first so that you can see it. The individual ships appear in the respective ship owner colour. Before a ship expects an action it flashes repeatedly briefly.

The numerical values 8-12 describe this one the strengths of the wind (after the Beaufort scale) of the weather simulator weather systems calculated. The higher the values are, the more strongly the wind blows. The weather simulator uses place typical values for the simulation, in certain areas, there therefore will be storm more frequently than into other.

The current strength of the wind is shown directly for the ship at critical phases or else in bars.

The action field in the left lower picture corner has the label start. If you select the field, the label changes itself in stop.

You select start and thus also the game the simulation time (simulation Elapsed time) runs.

Select stop to stop the time and haunt your other business.

You can select advertisement options next to the start button: You can vote for example, whether you would the earth like to see D as a globe in 3D or as a card in 2. You can by the way grasp and turn the globe with the mouse. Additional options are "show wind", "show towns", show "all players" and show "all ships". If many players have many ships, it can make sense on account of the clarity to remove single advertisements. On the right besides that the feigned date stands. In addition, the simulation or season is represented by a feigned watch down on the right.

Above over the world representation is an information bar. The names of the players are represented on the left. Business statistics of the select player can be seen in the middle. Before an action can be carried out, one must choose stop and then select the name of the player. Actions are then executed for this player.

## 7.2 Ship brokers

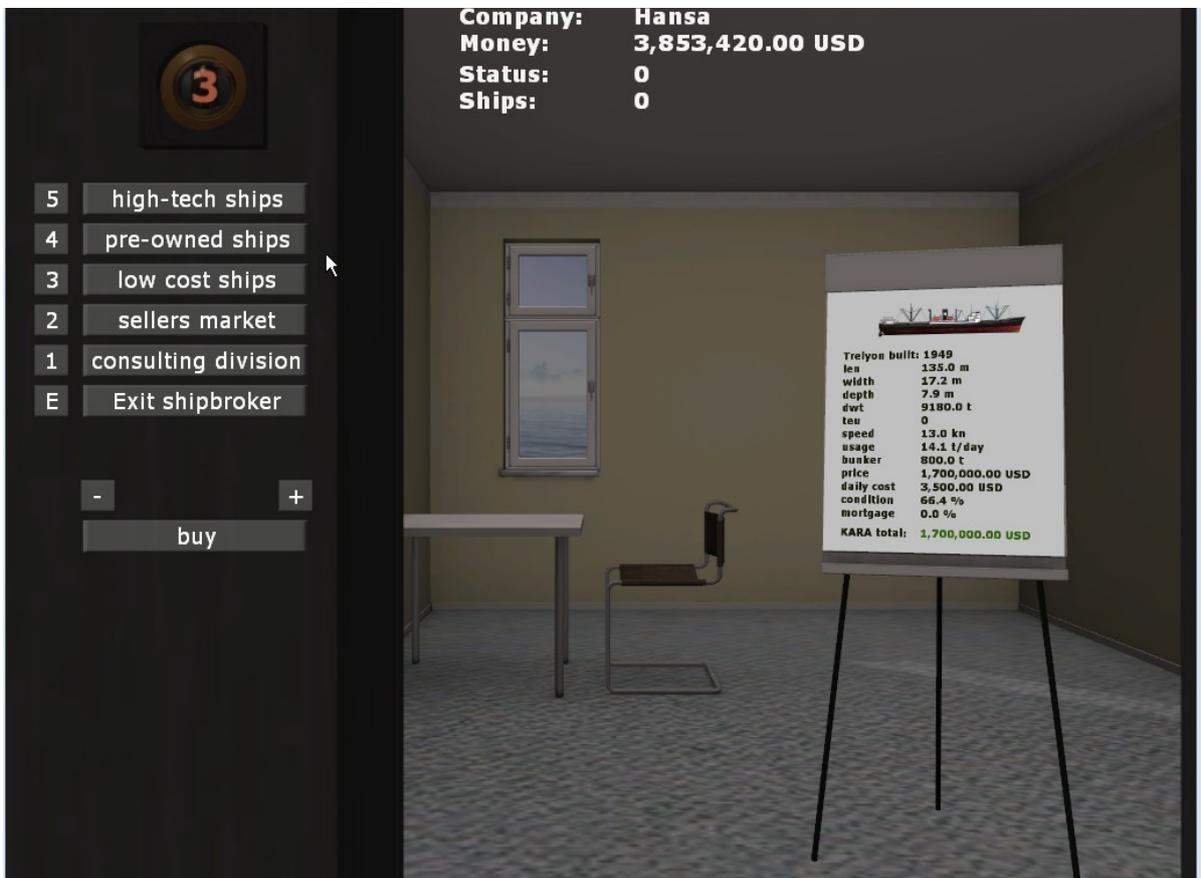
When you select KARA (Ship Broker), the player selected in the top left enters the ship broker's office. You enter an elevator. In the elevator, you can choose from one of five floors: The first floor has a consultation office (Kara never actually advises you, as in the classic version), on the second floor you can sell ships, on the third you can buy very cheap ships, on the fourth, good used ships are offered, and on the fifth floor, you can acquire modern, high-tech ships. E, as in exit ship broker, takes you to the exit. You leave the broker's office.



### 8 Ship purchase (Floors 3, 4, and 5):

Above, you see the name of your company and your cash balance. Use the + and - buttons to browse through the selection of ships. Click 'Buy', correctly, to purchase the ship displayed to you. You will then be prompted to christen the ship. Give it a nice name, one that can be proudly displayed on the seven seas.

After all the shipping companies have purchased their ships, click 'START ACTION'. The ships will be displayed on the world map in the colors of the shipping companies. Before a ship requires any action from the player, it blinks several times briefly.



## 9 Ship acquisition

KARA buys your ships here. This gives you the opportunity to sell your ship again if, for example, it is no longer profitable (too old, poorly maintained), or if you simply need money in the short term.

If the ship is mortgaged, the repayment price will of course be deducted. In the case of poor ship condition, it may happen that the ship is worth nothing, or has more debt than its material value. In this case, you can only sink the ship.

Note: New ships are automatically classified into three categories if they are capable of carrying cargo. Two extras are now included: Viking ship, slow but economical and cheap, and the new futuristic UFO freighter, super fast, can carry more than available volume but Super Expensive under Hightech!!



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## 9.1 Office



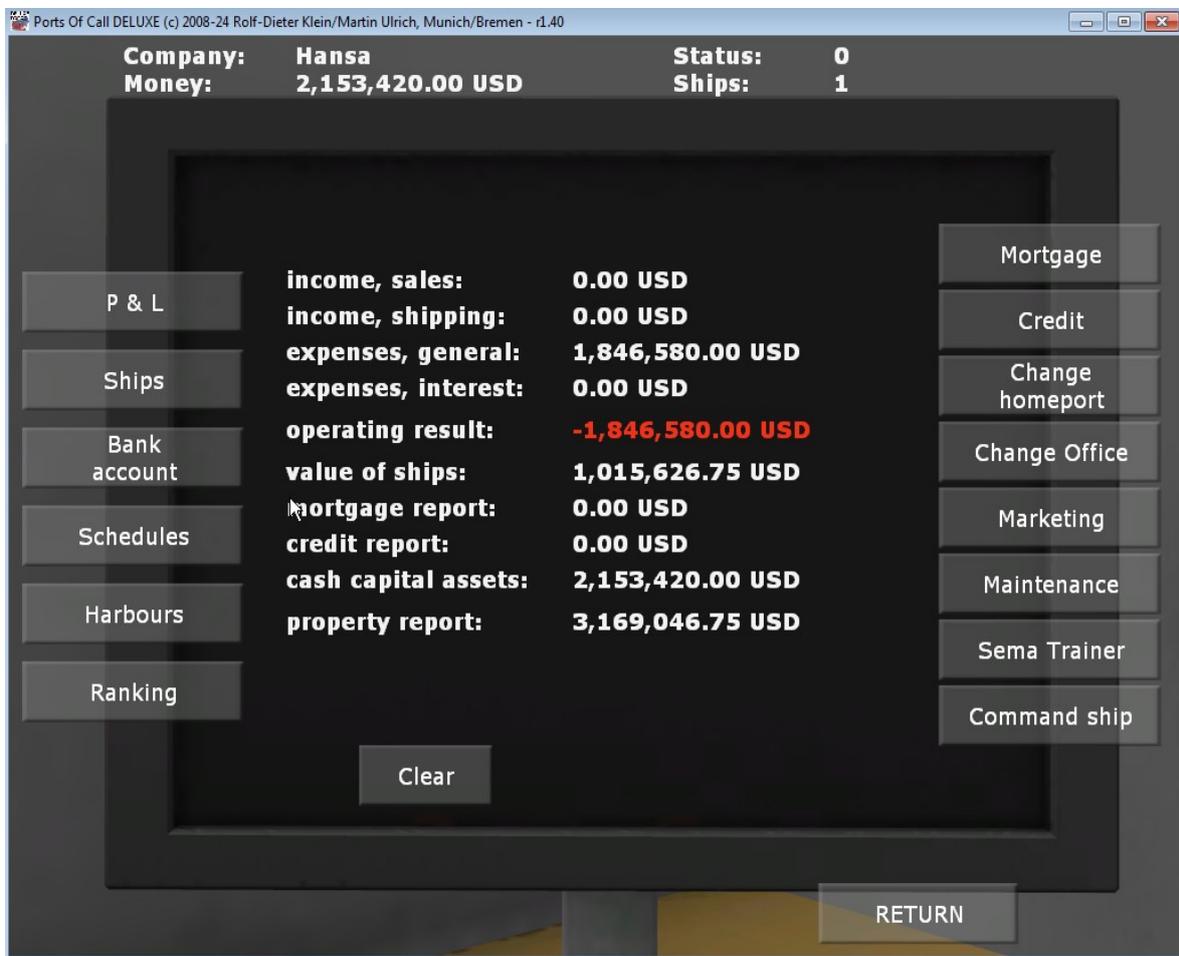
If you choose OFFICE, you will enter your office. Here, your books are kept, statistics analyzed, mortgages and loans applied for or repaid, profit and loss statements (P&L) are maintained, and your business development is depicted. You can change your home port, that is, reflag if you believe you can operate your business more profitably from another country.

Note: Regular visits to the office deter thieves. Click on P&L, the profit and loss statement, to see how successful you are as a shipping company.

### 9.1.1 P&L

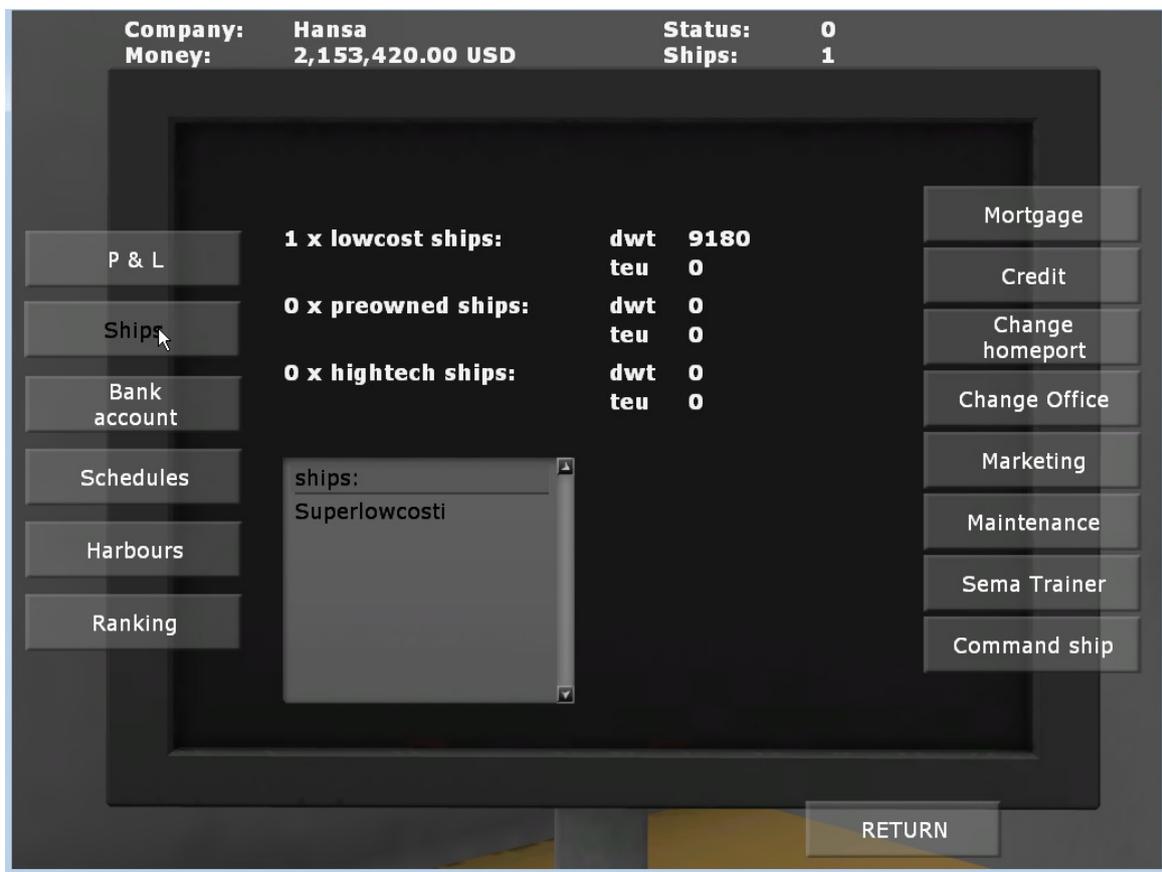
In this snapshot of your business activities, you've been working for a while. However, your operating result is still negative because purchasing ships costs money, and operating expenses are also included there. You can also delete the information, and then it will be recalculated. This makes it easier to check if you are already working profitably. You are only bankrupt when your assets are depleted: but it shouldn't come to that.

The assets are the sum of the values of all ships (value depends on the daily price and ship condition!) minus the mortgages taken out and minus the loans. Additionally, cash is added (we call it cash, but it's actually what you have in your account and possibly in cash in the office or in the ship's cash register).



### 9.1.1 Ships

You will find here a list of ships, sorted into three types: 'Cheap ships,' 'Used ships,' and 'High-tech ships.' Two important pieces of information are displayed: for cargo ships, the 'dwt' = Dead Weight Tonnage is important. This is a measure of a ship's carrying capacity; when added to the ship's own weight, it gives the total weight. 'TEU' is the unit of measurement for containerships, representing a 20 ft container. Besides TEU, there is also the term FEU (Forty-foot Equivalent Unit) = 40 ft. The 20 ft container has dimensions of 2.438m x 6.096m x 2.591m, while a 40 ft container has a length of 12.192m. In practice, there are a few variations (2.896m height and 13.716m length). Our containerships are loaded using the TEU unit, but in the simulator, you will also see the cargo mixed with FEU and TEU containers, as is possible in reality



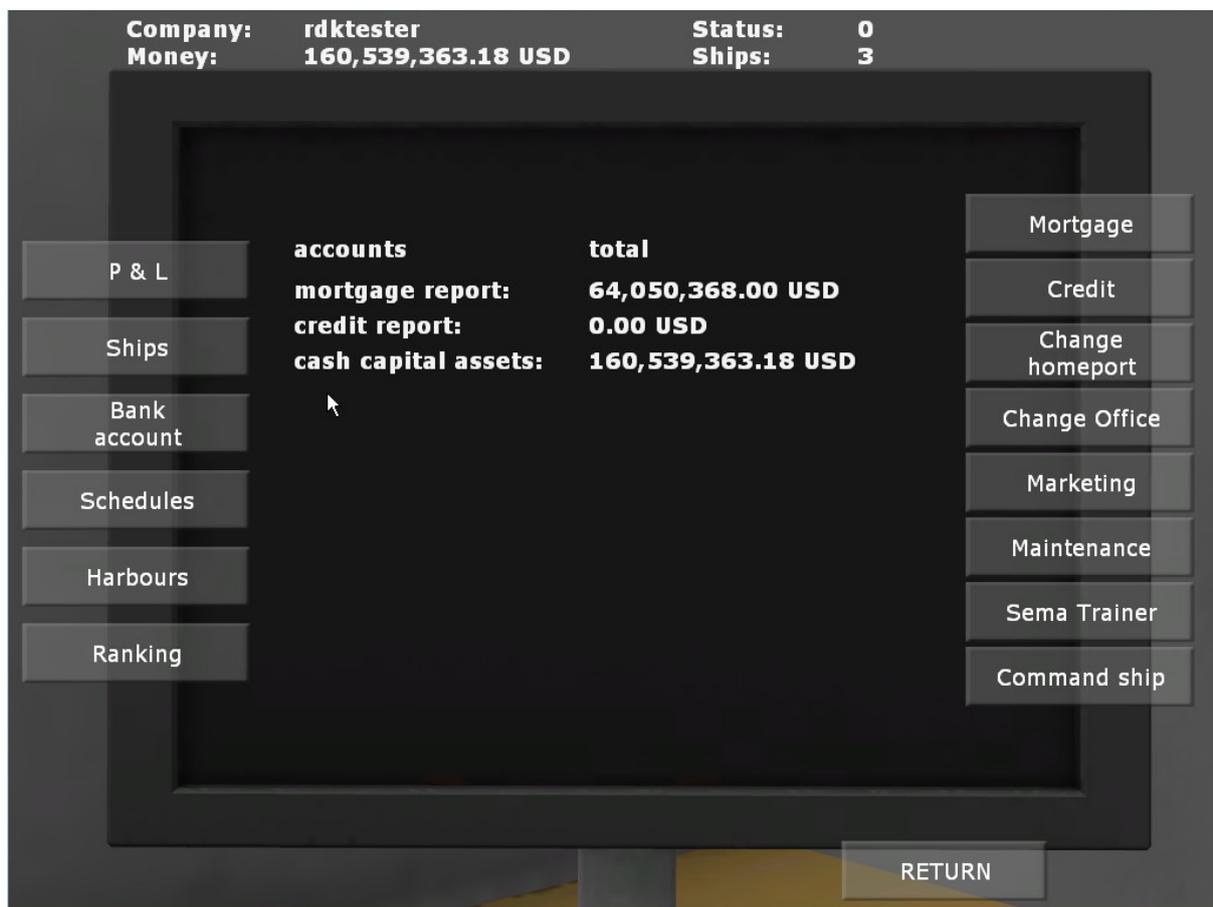
When you click on a ship in the list, you receive additional information about its current location. The term 'ETA' (Estimated Time of Arrival) indicates when the ship is expected to

arrive at the port. However, it will still take some time for the ship to appear in the captain's cabin, as there is typically a local waiting period and unloading time if cargo is on board.



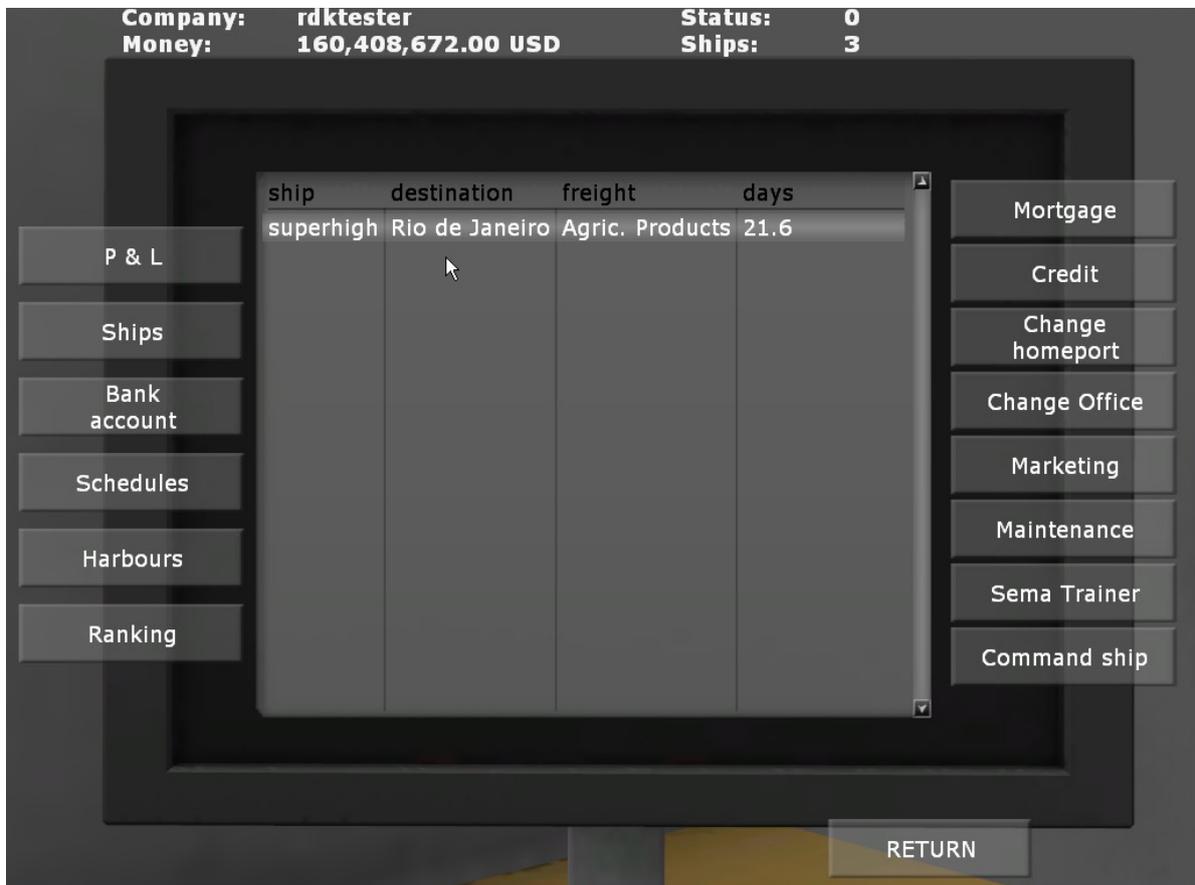
### 9.1.1 Bank Account

The 'Bank Account' shows you how much money you have and any loans you have taken out - if this is possible based on your status and financial situation. Mortgages are not automatically paid off, but you can do so at any time using the 'Mortgage' menu. The net worth is calculated as the sum of the ship values minus mortgages and minus loans, plus cash on hand. If the value is less than zero, this is considered BANKRUPTCY. If a ship is encumbered with a mortgage (which happens automatically except for cheap ships, and if the ship's condition is very poor), the net worth can quickly become less than zero!



## 10 Time-critical cargo

"Time critical cargo" provides an overview of all ships carrying cargo that must be delivered within a specific timeframe. It's important to pay special attention to these ships. If the delivery deadline is exceeded, penalties apply. It's crucial to note that the calculation of ETAs does not consider the loading and unloading times of the ship or the waiting times at the port, but only the best travel time. Older ships take longer to load and unload. Additionally, strikes, bad weather, etc., are not factored in. Therefore, it's advisable to ensure you have some days of buffer when accepting time-critical cargo or consider avoiding it altogether. Sometimes, it may be worth paying a penalty, but only if you have a good sense of the timing involved. In reality, the situation is similar; while loading and unloading times have decreased with modern ships, if all berths at the port are occupied, you may have to wait, which can incur additional costs!



### 10.1.1 Ports

The table displays all the ports available in the game. The three columns indicate which ports the player has visited, attempted to visit manually, and successfully visited. Each successfully visited port earns a status point. The table shows information for all players collectively.

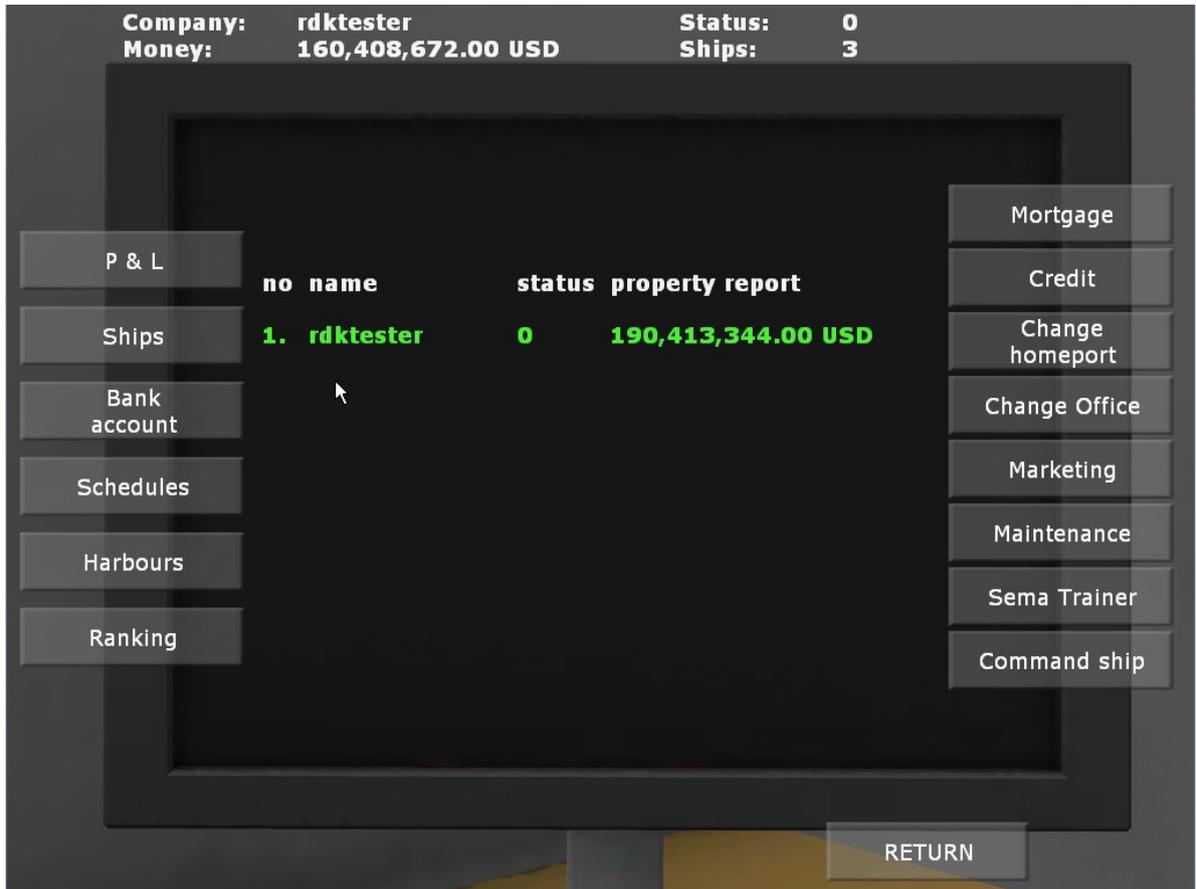
Company: **rdktester**      Status: **0**  
 Money: **160,408,672.00 USD**      Ships: **3**

harbour	visited	manual	sucessful
Aalborg	0	0	0
Aarhus	0	0	0
Adelaide	0	0	0
Alexandria	0	0	0
Algiers	0	0	0
Amsterdam	1	1	0
Antwerpen	1	1	0
Auckland	0	0	0
Bangkok	0	0	0
Barcelona	0	0	0
Bremerhaven	0	0	0
Brisbane	0	0	0
Buenos Aires	0	0	0
Calcutta	0	0	0
Cape Town	0	0	0
Caracas (La Guaira)	0	0	0
Charleston	0	0	0

Navigation buttons: P & L, Ships, Bank account, Schedules, Harbours, Ranking, Mortgage, Credit, Change homeport, Change Office, Marketing, Maintenance, Sema Trainer, Command ship, RETURN

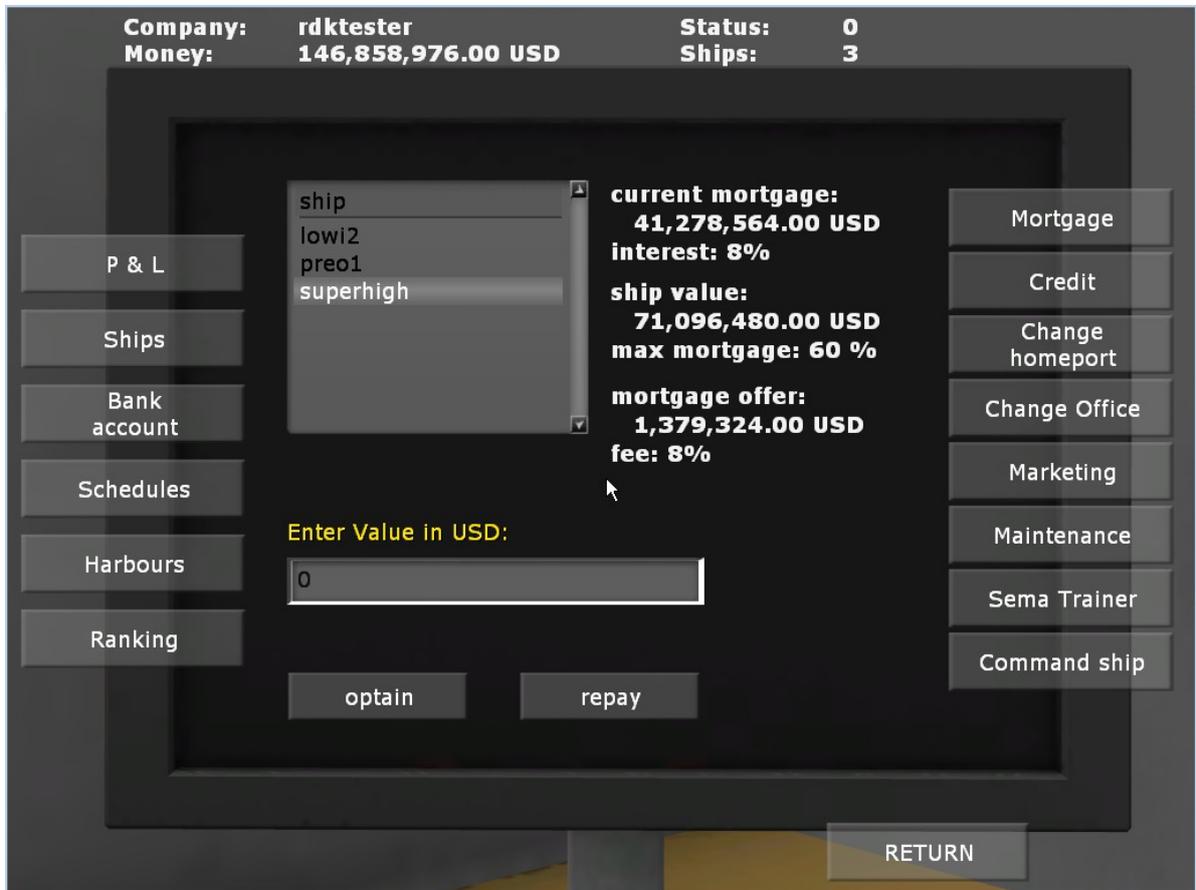
### 10.1.1 Ranking

The leaderboard is determined by the number of status points and the total wealth. Status takes precedence over wealth. The winner is indicated in green, while players who have gone bankrupt are in red. The list is sorted by player number. Player 5 ('eee') has won here.



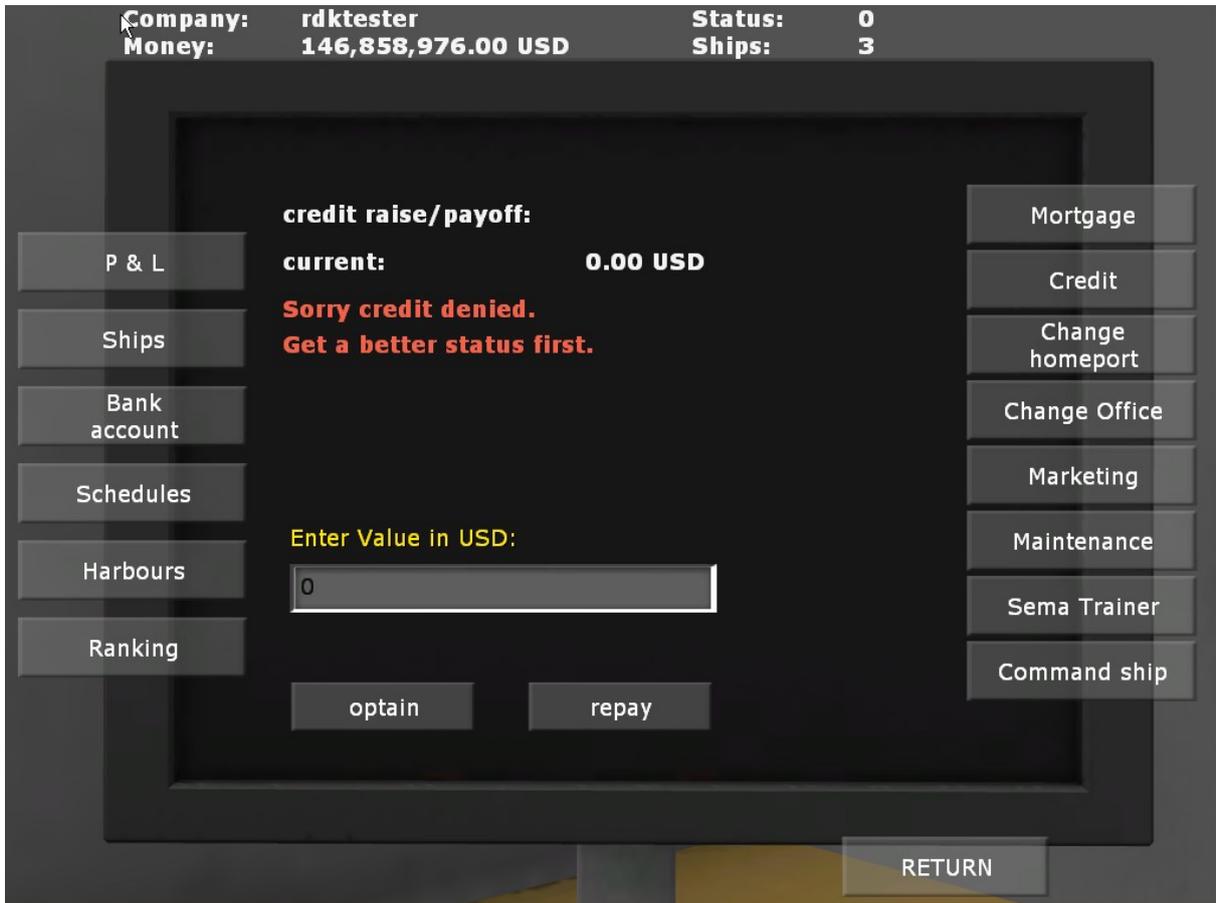
### 10.1.1 Mortgage

And 'Mortgage' shows which ships have mortgages. Mortgages are special, usually relatively inexpensive loans that can only be used to purchase ships.



In this case, you could additionally take out a mortgage of 1.3 million USD to obtain cash, for example.

### 10.1.1 Credit



‘Credit,’ as opposed to a mortgage, is a regular loan that you can use to pay for fuel, crew wages, and the like. However, you can only get the loan if you have achieved a certain status and if your assets are in order. In the example, if a loan of 1.2 million USD has already been taken out. The bank is offering another loan of 10.2 million USD. The bank charges 50% per annum, which is 50% of the total assets. However, to qualify for this, as seen here, you need to have a good status. At the beginning of the game, you can't get a loan; you start with 10%, and so on. In this menu, you can also repay the existing loan, which incurs an annual interest rate of 12%.

### 10.1.2 Reflagging

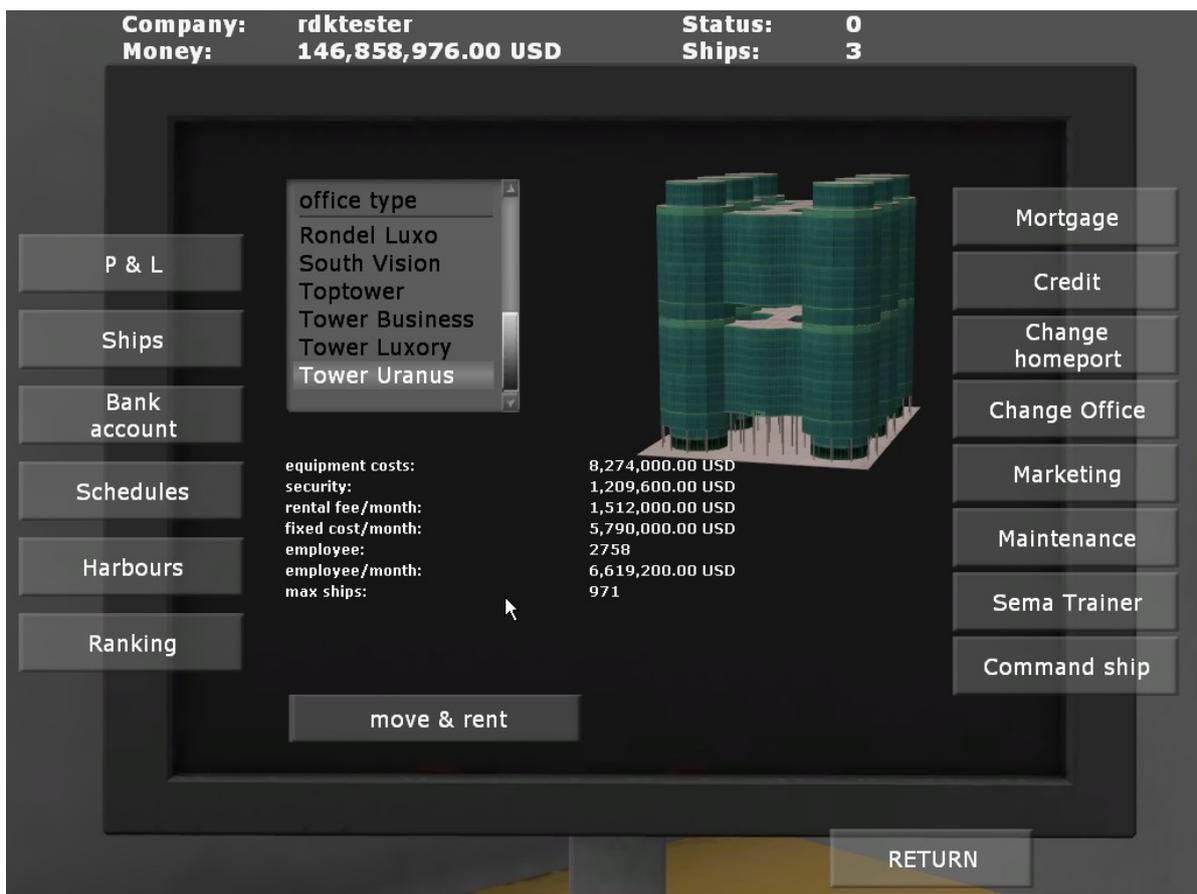


With 'Reflagging,' you can change your flag state. For example, if you switch from the German flag to the Liberian flag, you can operate your ship more cheaply. However, under flags of convenience, the risk of accidents also increases because you hire less qualified sailors there. Reflagging costs 1 million per ship, plus the relocation costs. In the new location, you get the same office (type or size) as before. Reflagging to Aarhus costs 3.065 million USD here. It's only worth it if you don't have many ships yet and you're using a country with significantly lower operating costs. What works best becomes evident through experience during the game."

### 10.1.3 Change office

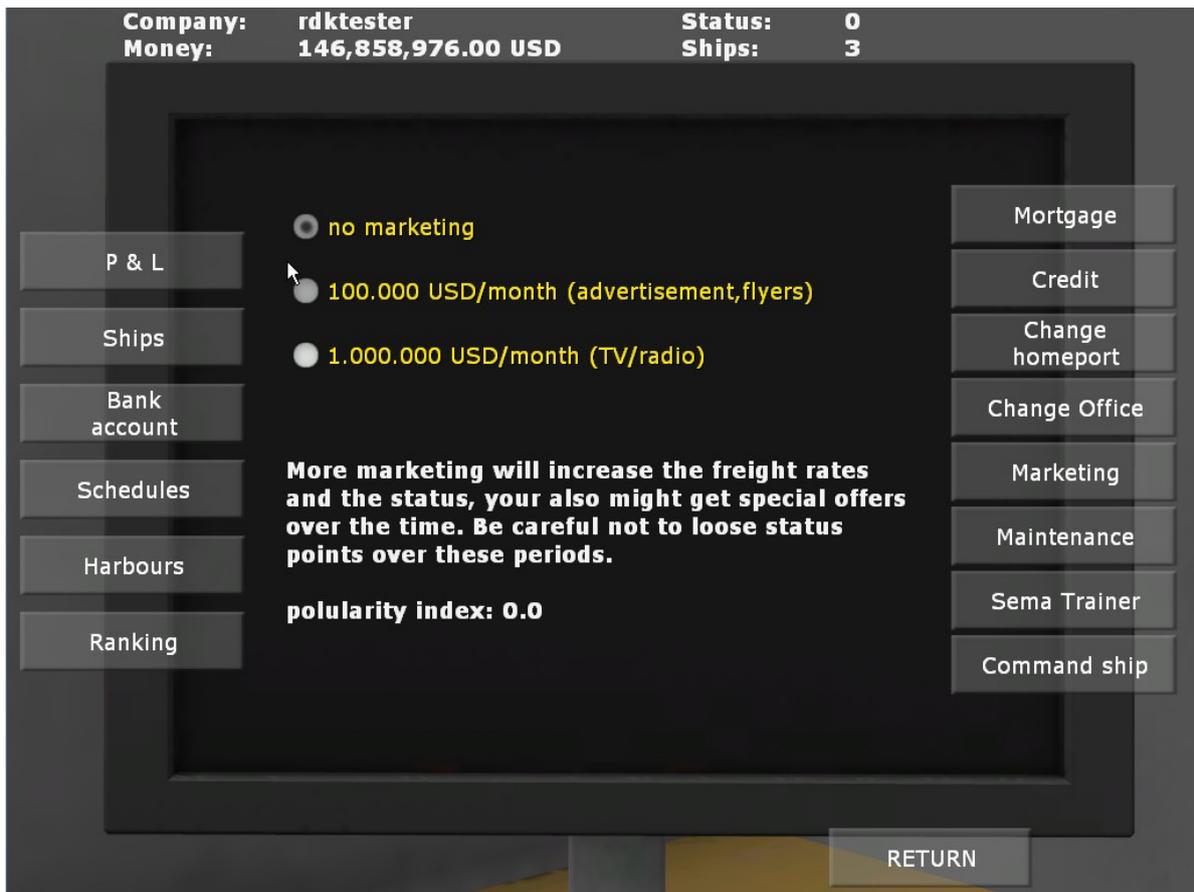
"Changing Office" allows you to have a larger or smaller office. The more ships you have, the larger your office needs to be because you need more people to manage the ships. Here, you relocate without necessarily changing your flag state.

It's advisable not to choose an office that's too large, as costs can escalate. It's also better to invest in larger ships that can generate more revenue, rather than many small ships that incur higher administrative costs (not always is an expensive or larger ship necessarily profitable.).



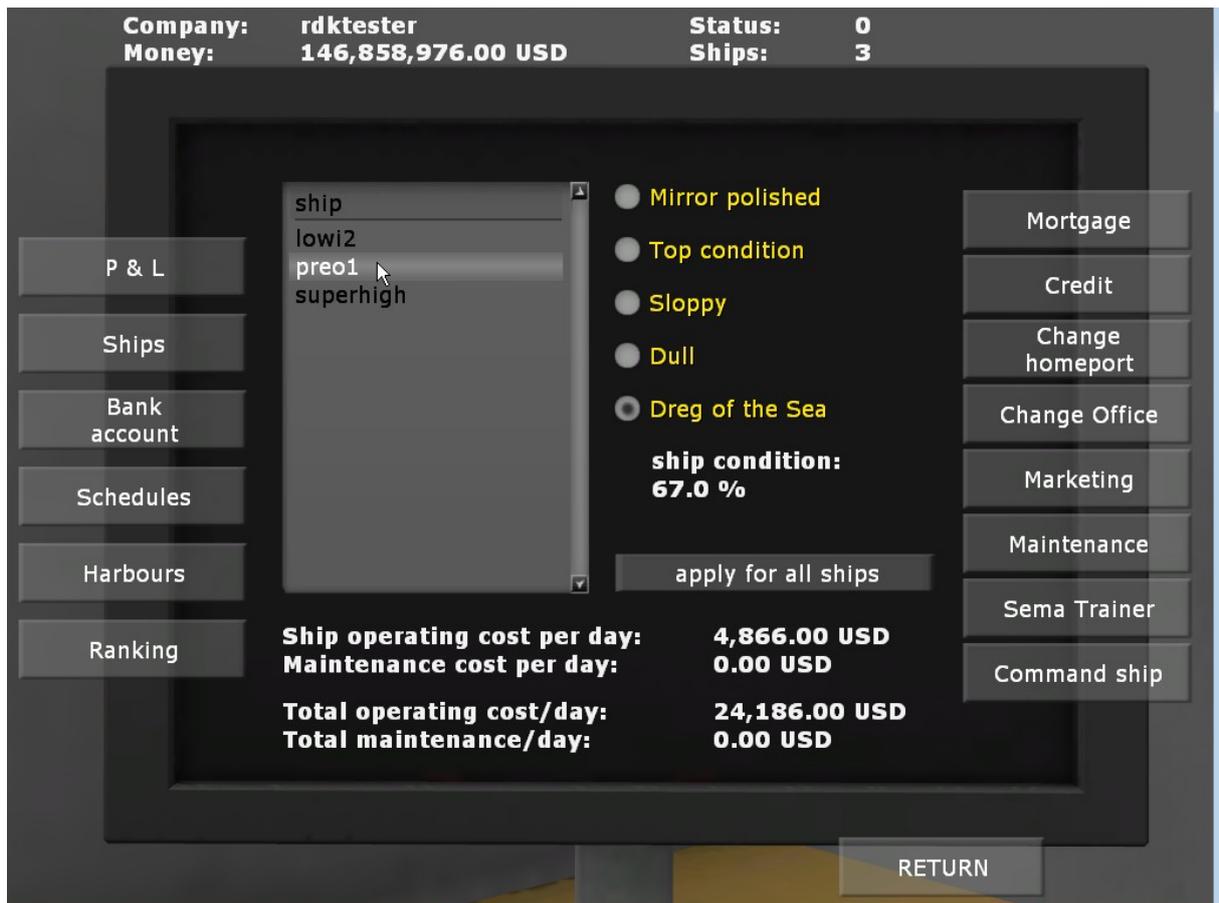
### 10.1.1 Marketing

"Marketing" is an interesting aspect. Those who advertise too little won't get interesting cargo. Effective advertising also boosts your status, which becomes significant, for instance, with the bank and in the rankings. However, excessive advertising wastes money, which makes little sense from a business perspective. You can monitor the effectiveness of your advertising at the bottom of the popularity index."



### 10.1.1 Maintenance

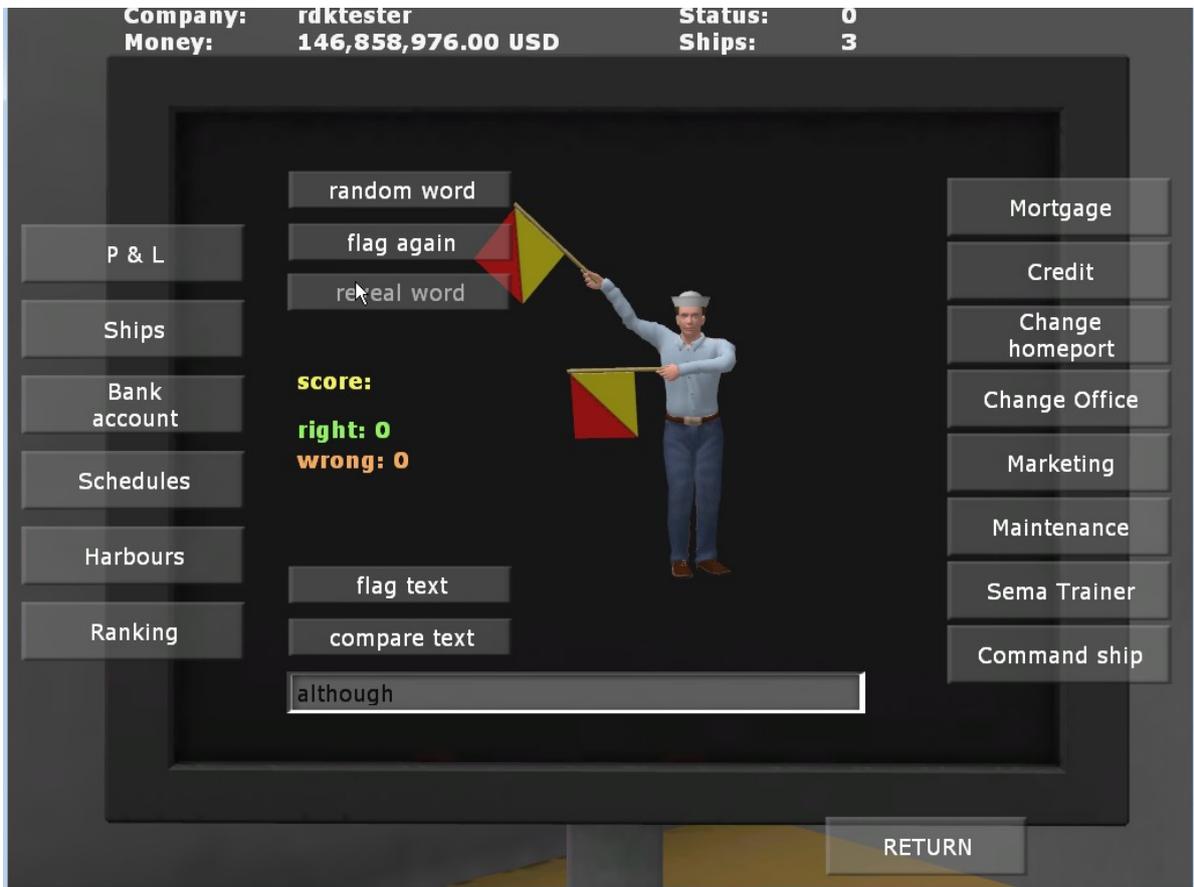
"Maintenance" automates the upkeep of a certain ship condition. Similar to advertising, a ship in poor condition might sink faster, be endangered by storms, or require occasional dry-docking due to diseases, among other factors. Moreover, it's worth less, which diminishes the overall value of the company."



"Good maintenance naturally incurs costs and can quickly exceed the already incurred general operating expenses. Therefore, excessive maintenance becomes an expensive luxury."

### 10.1.1 Semaphore Trainer

The 'Semaphore Trainer' helps you learn the semaphore or flag alphabet. This was how ships communicated with each other before the introduction of Morse code and radio communication.



Display a random word in the flag alphabet and type your guess into the corresponding box. The table at the end of the manual will help. Start with shorter words. Click 'Random Word' again, then 'Show Flag'—here, 'I' is displayed; the solution is 'IN' in this example, with 'N' to follow. Great brain exercise. You can also display words by typing text and clicking 'Flag Text'. This works with individual letters too, making them easier to learn.

For each correct word, you earn a status point. Then every 10 words thereafter. The table at the end helps with learning. We use a word table of the 10,000 most common words in the German language (kindly provided by the NLP group at Leipzig University, wortschatz.uni-leipzig.de). The most common words will appear more frequently in the queries

### 10.1.2 Change speed

With 'Change Speed', you give the captain of a selected ship a new speed instruction. This is important, for example, if you made a mistake with a time-critical cargo and need to arrive faster. Unfortunately, this also results in higher fuel consumption, and if it runs out, it becomes expensive, and the time-critical cargo cannot be met anymore.

In the example, you can see that an ETA of 3.7 days is not enough to meet the deadline of 2.7 days. Additionally, you would need to add approximately 1-2 days for unloading and waiting time, so even with an ETA of 1.2 days and maximum speed, it's still tight. However, with the selected ship, it's just enough to arrive on time.

You select the ship you want to slow down or speed up, set the new sailing speed, click 'Set Speed', and radio the instruction to the captain. The captain will try to fulfill your request if possible.

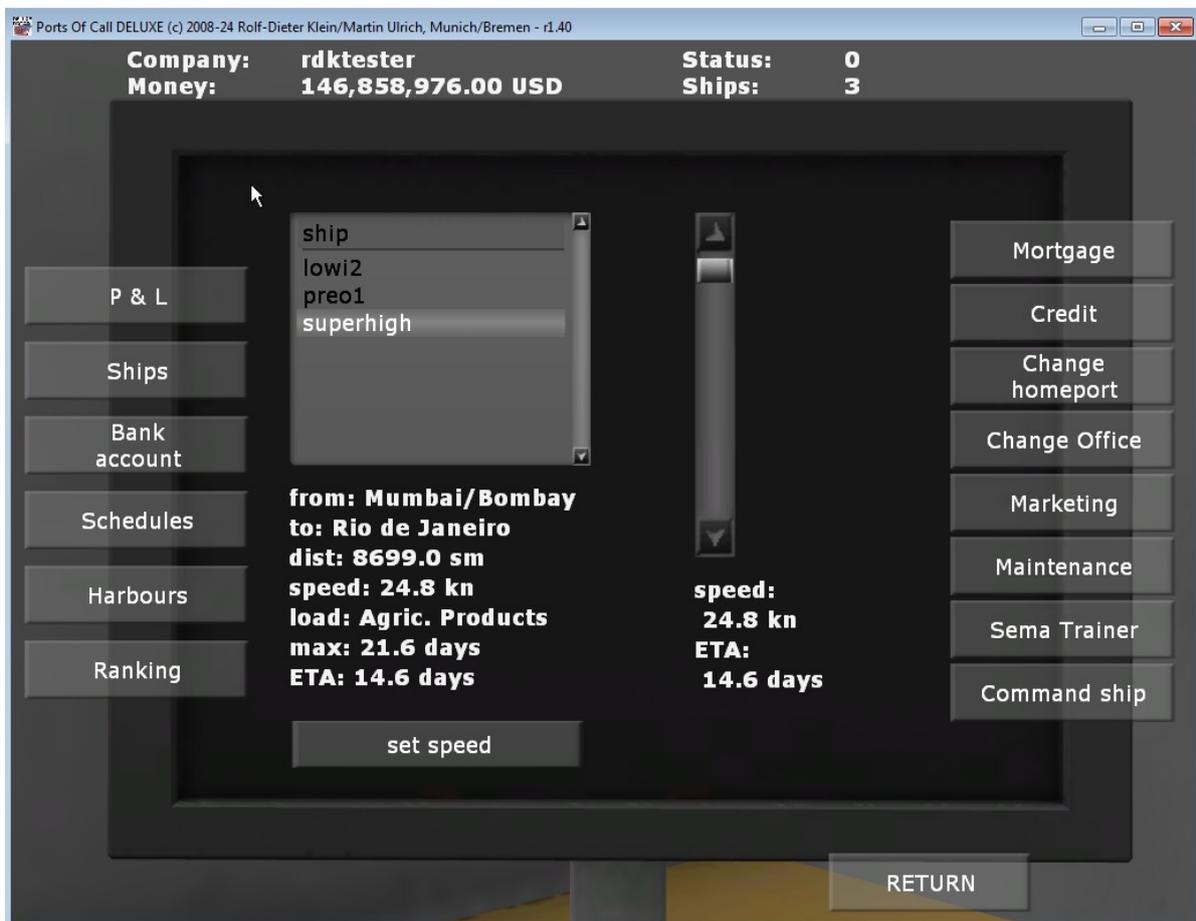
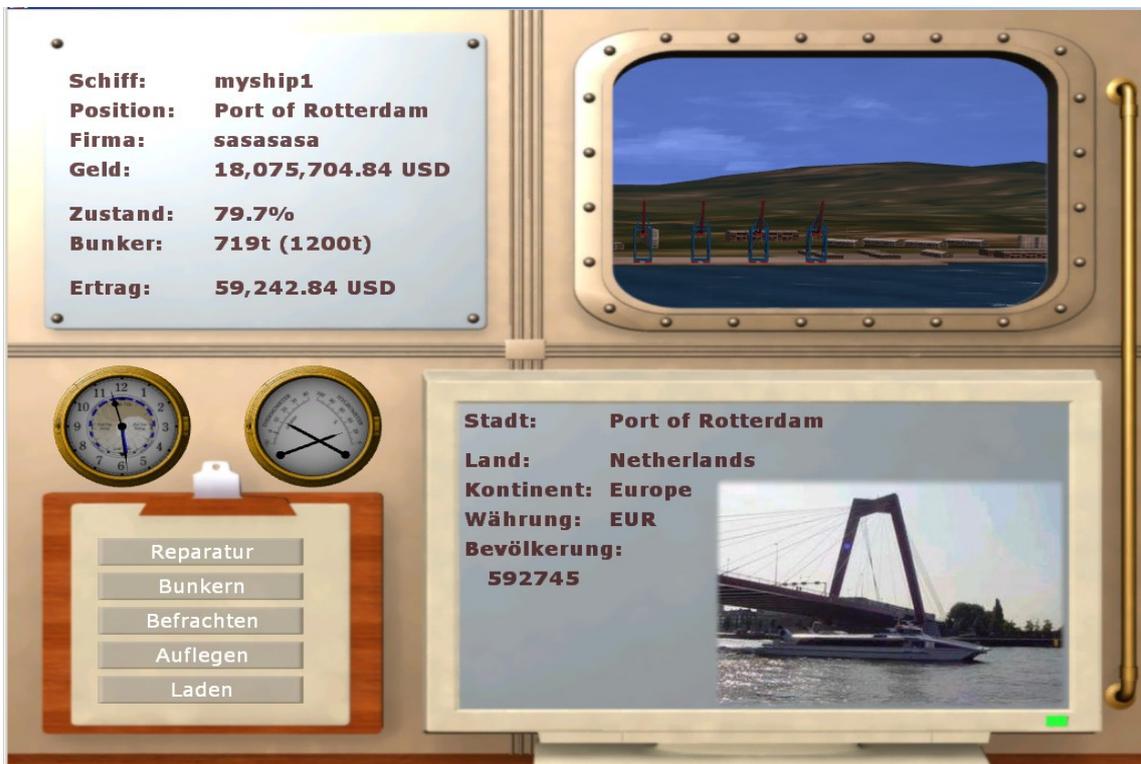


Bild zeigt, die Fracht ist jetzt pünktlich angekommen.



## 10.2 END

On the right side of the world display, you'll find additional buttons. If necessary, you can end the game by pressing END. Alternatively, pressing Alt and F4 will also end the game from anywhere. However, without saving, the game will end abruptly. Only by clicking 'END' will you automatically find out which player had the most success.



### 10.3 NEW

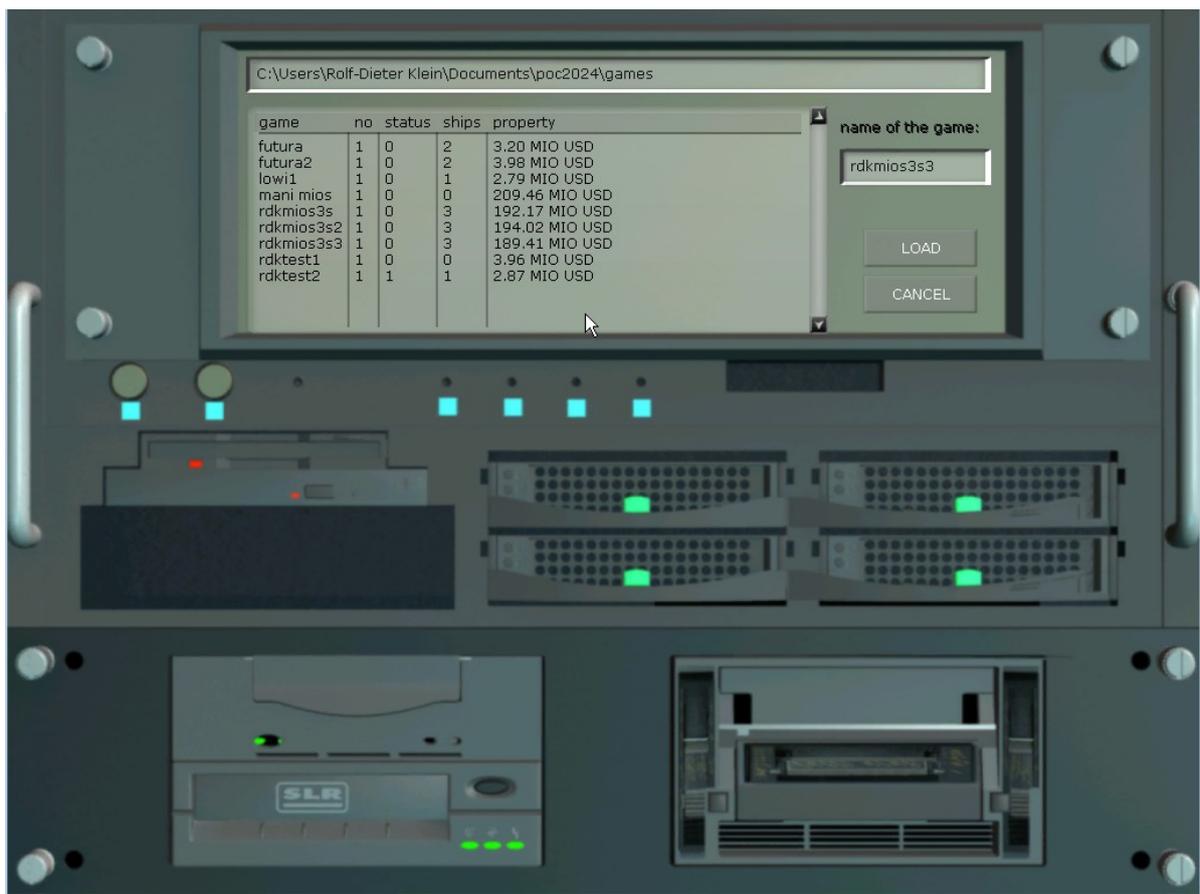
allows you to start a new game. The game will not be saved. Therefore, you should save your progress beforehand.



## 10.4 LOAD

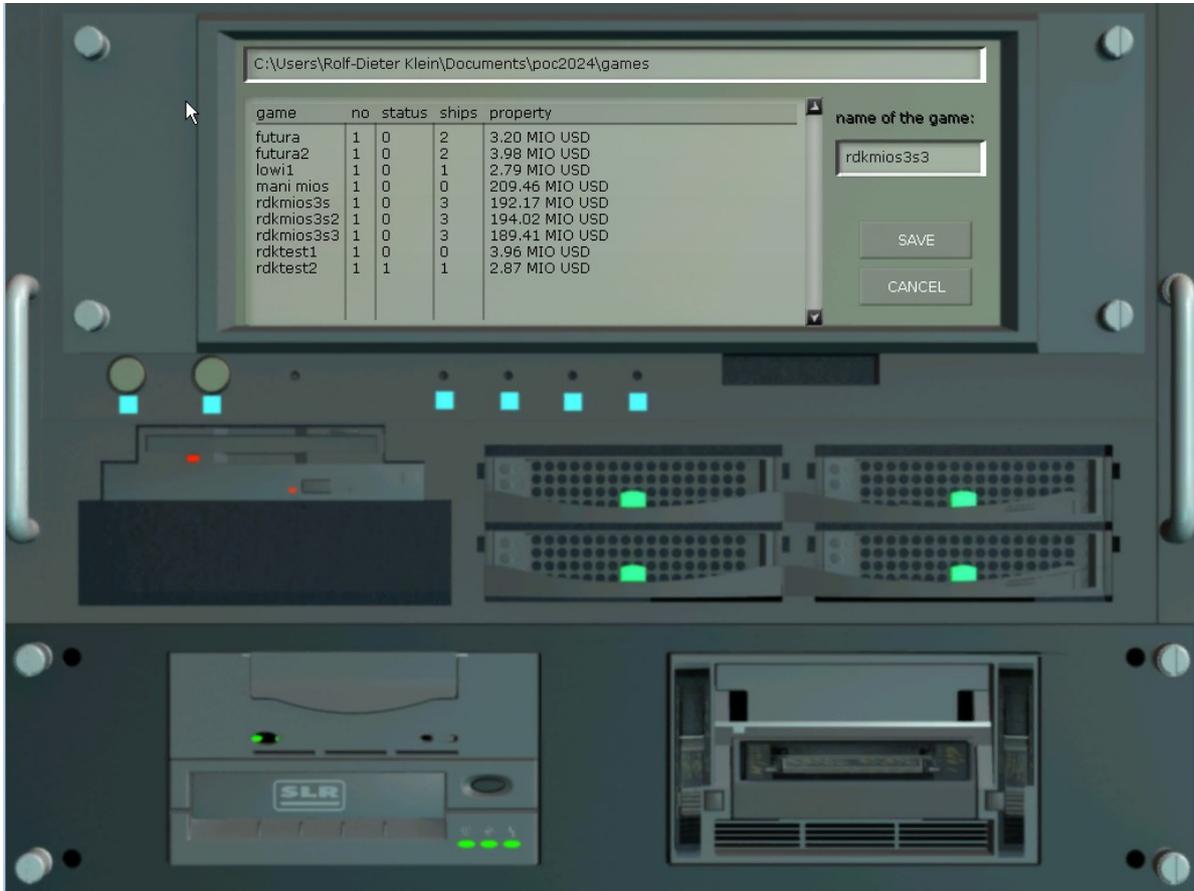
leads to the table of contents of saved games. You can select an interrupted game from there and continue playing.

Here you'll also find information on the number of players involved, the number of ships in the saved game, and the maximum status and maximum wealth achieved. The top line indicates the storage location. You can create a copy from there or use the Explorer to delete old save files, etc.



## 10.5 SAVE

saves the current game state under a chosen name.

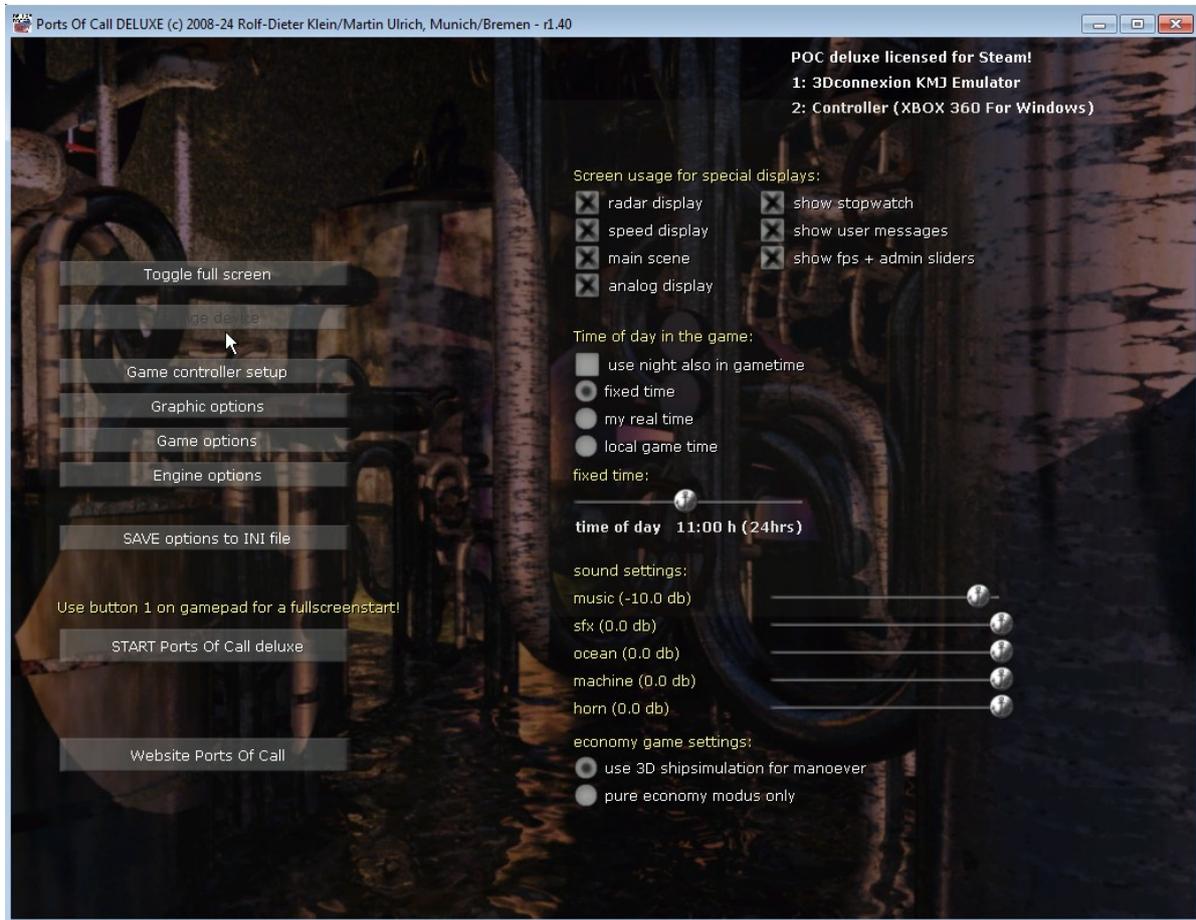


### Developer comment:

Sou can also exchange game states with friends by simply copying the file to the specified 'games' directory. However, it's important that the friend has the same version number of the game (or higher). The version is displayed in the header (here 1.29) in windowed mode, or on the startup screen when launching the game.

## 10.6 Options

Takes you directly to the maintenance menu 'Game Settings'. Here, you can adjust the music and signal horn volume, or disable the 3D simulation of ship maneuvers and opt for the pure economic simulation. The other menu items are also accessible, of course.



See also description on the maintenance page Error: Reference source not found

## 10.7 ABOUT

About tells you who was involved in the making of this program.



Special thanks also go to the fans of Ports Of Call who contributed to the data, optimizations, and suggestions, especially in the development of the business game POC XXL and POCSIM3DII.

## 11 Events

Events occur automatically during the simulation, such as entering and leaving ports, the captain's cabin where cargoes and destinations can be determined, but also unpleasant events such as storms, attacks, pirate encounters, epidemics, fires, rate changes, or maneuvers like avoiding reefs, icebergs, or shallows, and rescue missions. During these events, players can gain or lose status points.



Events are announced by a blinking ship if a ship is involved, or by a message on the main screen, for example, when interest rates are due or when you win a prize, etc.



Here a rare event showing in german language...

## 11.1 The harbor entry display



If you want to approach a port, you must decide whether you need a tugboat to dock. Make your choice. The tugboat costs depend on the port city. Sometimes the tugboats may also go on strike, and you have to manually dock. If you still don't want to do that, it's possible to call the tugboats anyway (if you cancel), but that will be expensive. Successfully docking also earns you a status point. You can learn more about manual docking in the simulator section.

## 11.2 The Captain's Cabin

You now see the Captain's Cabin, looking out onto the harbor through the window. The board under the window displays the name and country of the harbor, with information about the country below.



In the top left, you can see the name of the ship, its position, the company name, your cash balance, and the condition of the ship. You can also see the fuel tank level and the revenue from the current voyage.

At the bottom left, you'll find additional options for actions.

### 11.2.1 Repairs

If you've purchased a cheap ship or weathered a heavy storm, there may be minor repairs required. Click on 'Repairs', and you'll enter a screen showing the condition of the ship and the cost of repairs.

In the shipyard window, you'll see how much it would cost to restore your ship to 95% condition, as well as the time it would take. Enter the percentage of repair you desire and select 'OK'. Caution: Below 50%, the ship may potentially sink! It's best to aim for 100% if you can afford it.

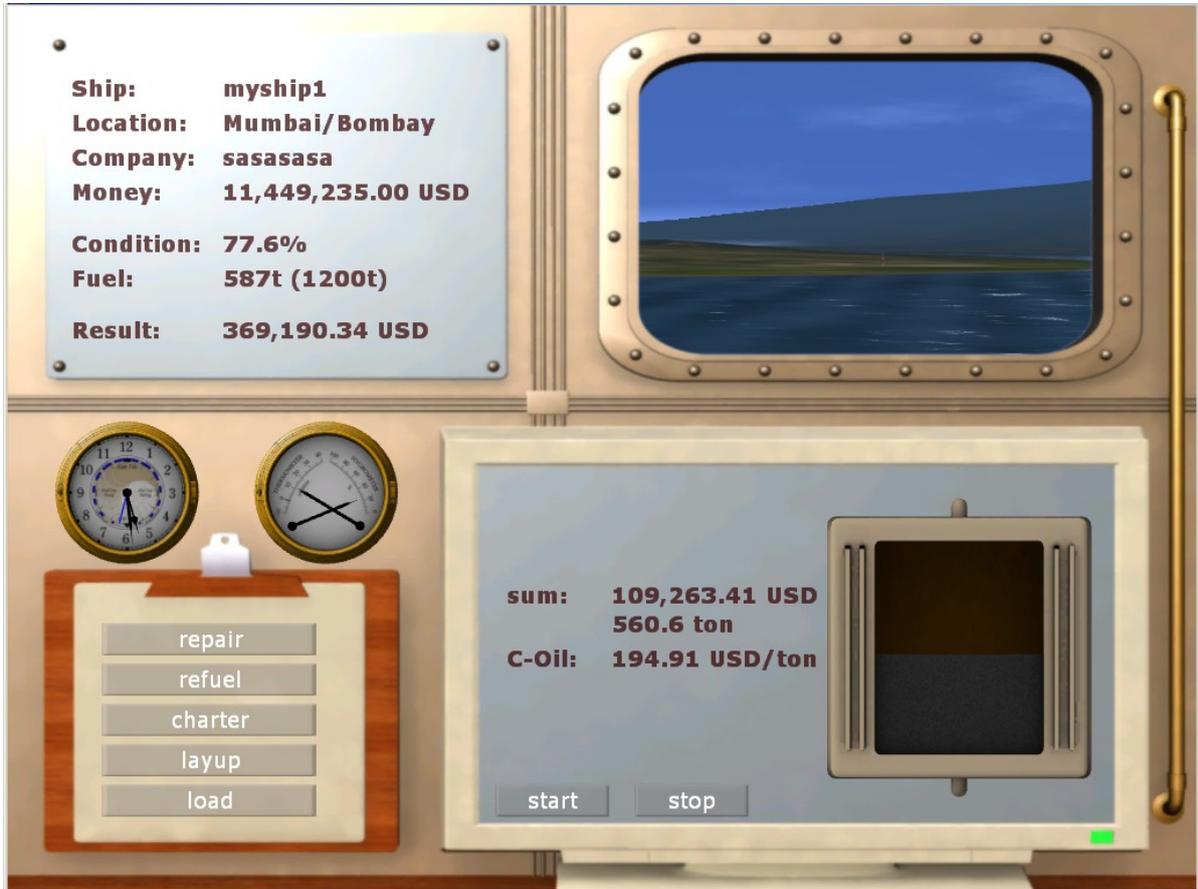
If you let your ship deteriorate too much, it could end up like this:





### 11.2.2 Bunker

With bunkering, you can, in simple terms, refuel your ship



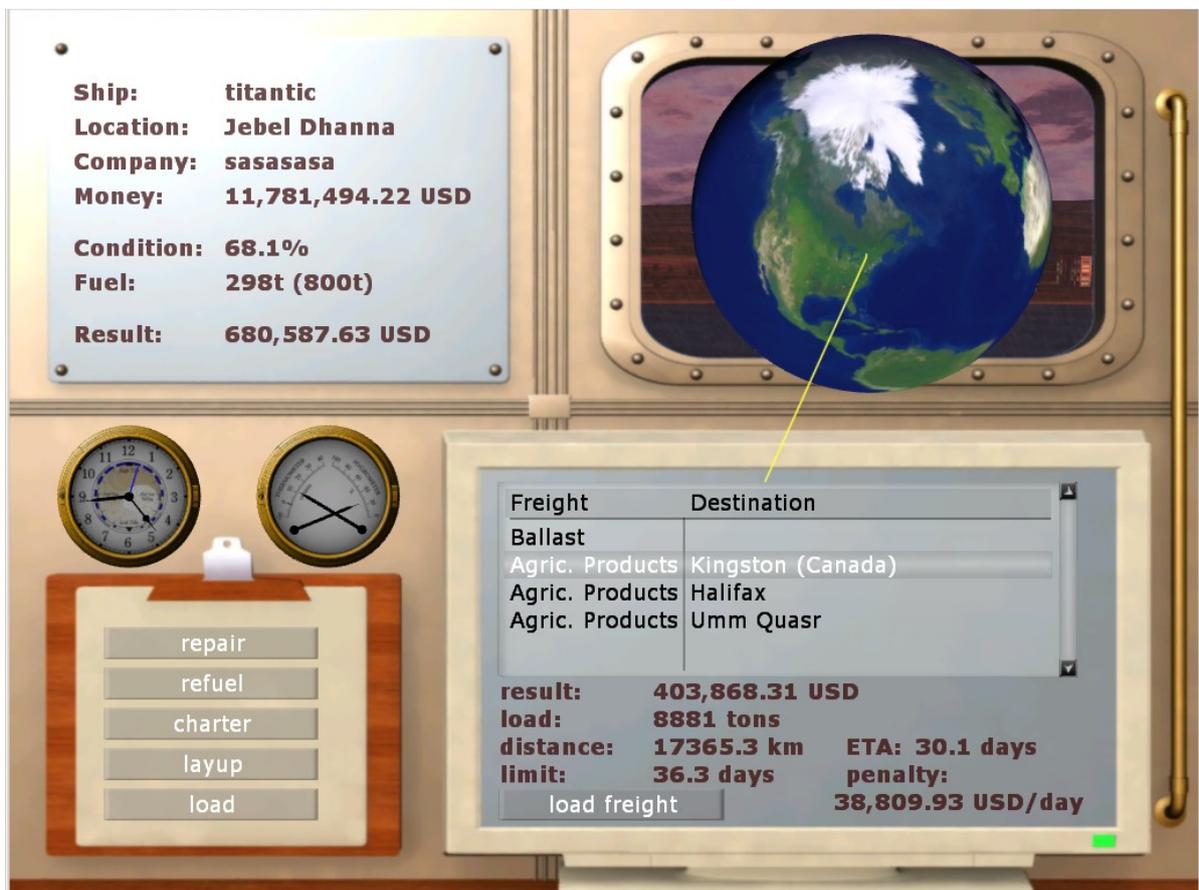
Select Start and Stop to initiate or halt the process. Caution: Bunker prices vary from port to port and, of course, with the course of the economy. So, it's advisable to refuel when the price is low. However, if you're carrying time-critical cargo, then you'll need a lot of fuel for full speed, and it's recommended to have a full tank.

If you run out of cash, you won't be able to bunker anymore. In that case, your only option is to 'lay up' the ship and either acquire cash through a loan, mortgage, or ship sale, or keep it laid up until another ship earns the necessary funds.

### 11.2.3 Charter

With this, you select the most favorable cargo and its next destination port (Port Of Call). Different cargoes are offered in each port. The freight rate, which is the amount the shipowner receives for transport, is displayed below. Below that, you see the mass of the cargo, followed by the distance (distance) to the destination port in kilometers. You also see the estimated travel time as ETA (Estimated Time Of Arrival). To get the most lucrative cargo, simply click on various cargoes and see what yield you can expect.

Time-critical cargo is another special case: If a deadline and a time frame (e.g., 14 days) are displayed below the rate in the bottom left corner, you must deliver the cargo to the destination port within the specified time frame. If you fail to do so, you will incur the indicated penalty per day of delay.



Beginners should exercise caution with time-critical cargoes until they can assess the travel time. The program displays the best time for the ship at maximum speed with the ETA. Waiting times at the port, which can be about 1 day depending on the port, must be added,

as well as the loading and unloading times, which can be up to 2 days for older ships. Additionally, you need to consider the time required for detours during a storm or other encountered obstacles.

It's also important to know that traveling at full speed consumes a lot of fuel (as does sailing through a storm), so you should fill the tank completely beforehand. Once you've decided on the destination, click 'Load'.

### 11.2.4 Load

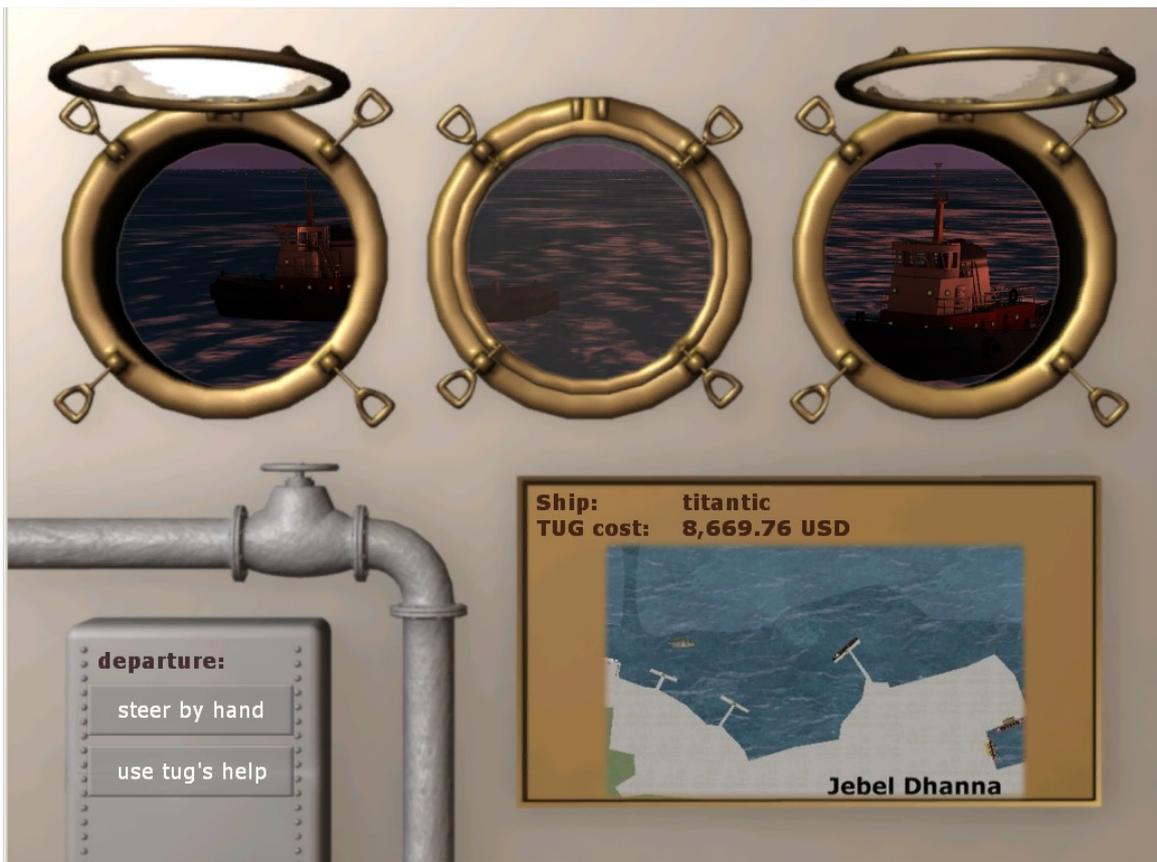
After selecting 'Load,' you will either proceed directly to 'Loading' or you may be presented with a smuggling offer, but be cautious as you could be caught at the destination port. The risk of detection varies depending on the country or port. Here, your travel details will be displayed again. Then click 'leave harbour.'



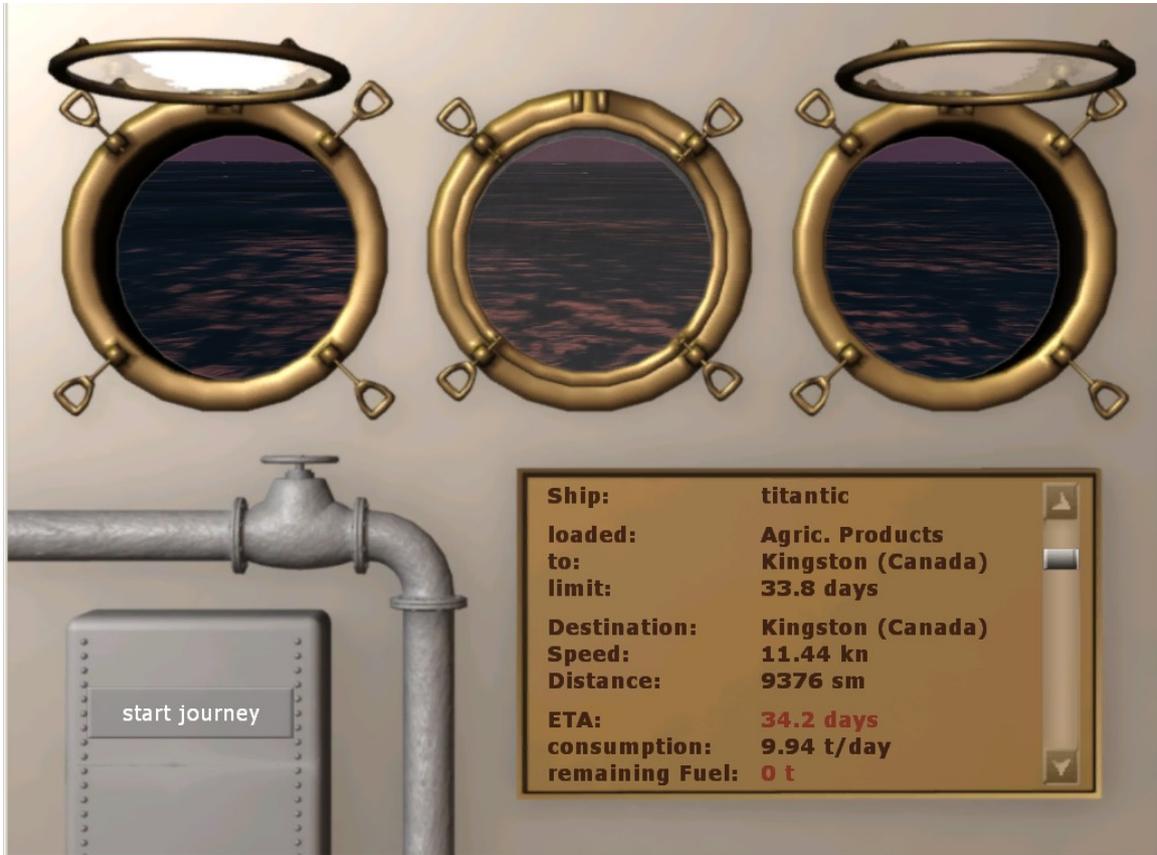
If you have contraband cargo on board, the information will also be displayed in the image, along with the destination, here shown as 'Shanghai' in the example. One should then be careful to navigate to the port to unload the goods. Usually, it's the destination port of the cargo, unless you've decided not to take anything (except ballast), in which case the destination of the contraband will be provided by the contractor.

### 11.2.5 The harbour departure menu

Next, the ship is essentially loaded in the background. You won't hear from it again until it's time to depart. You decide whether to depart manually or with tugboat assistance. If the tugboats aren't on strike, you can depart with their help (otherwise, you may have to abort the simulation and pay a penalty). If you choose to depart manually, you can earn status points as a reward for flawless work. However, you won't earn them when departing, as that would be too easy. You can press F3 to display an overview map and see the destination marked within a circle, which you'll need to navigate through.



Then click on 'Start journey,' and off you go. In this example, the captain cannot meet the deadline. There is not enough margin.



He will have to pay a penalty; the set speed is 11.44 knots. Additionally, he will run out of fuel. To change that, he needs to pull the throttle lever to the right to increase the travel speed. However, the fuel bunker will run out in this case, and he will have to accept assistance along the way. If the ETA is no longer in red, there is a chance of arriving on time. However, beware, the unloading time and waiting time at the destination port still need to be added (the loading time has already expired here!). Therefore, approximately 1 day of reserve time should be added for waiting time, 1-2 days for unloading (depending on the type of ship), and then it should be fine, if there are not too many storms in the way. However, storms can be navigated through if the ship's condition is very good, otherwise, it will cause damage to the ship

### 11.2.1 Layup

Layup gives you the option to lay up a ship for a period of time. Laying up means leaving the ship idle anchoring outside the port. One does this, for example, when freight rates do not cover operating costs. In the layup screen, you enter how long the ship should wait for better freight rates. The costs for the crew and interest continue to accrue. You can also specify a fraction of a day, for example, 0.1 for 2.4 hours. During this time, it is unlikely that there will be a change in the freight rates, but a change is expected every day. New freights are added, and old ones are removed. Layup can also be used to sell a ship afterward, for example, if it is no longer worthwhile to repair the ship, or if you run out of money (or need a loan in the meantime).



## 12 The shipsimulator

Maneuvering is one of the most interesting tasks for the ambitious captain. The ship often needs to be manually controlled, such as when docking, departing, or dealing with crisis situations at sea.

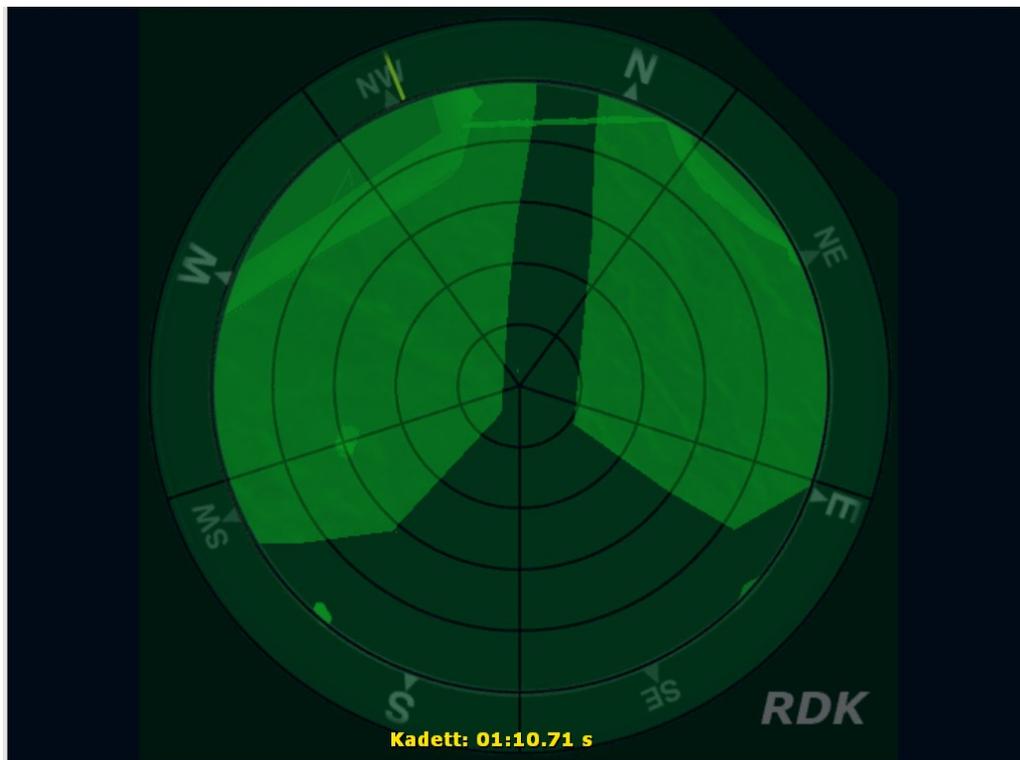


The control station consists of the following components: radar display, optional analog display (only if activated in the maintenance menu), and the speed controller, speed indicator, and rudder controls.

## 12.1 Radar

With the F3 key, you can display an overview map, making it easier to see the general direction. Pressing F3 again hides the map. The radar display provides an overview of the scene. You can also display the entire map with F3. Zooming usually occurs automatically along with the radar range. When you get close to the destination, automatic zooming is triggered. If you have an additional joystick with sliders, you can use them for zooming, but you need to adjust the settings in the maintenance menu.

Our radar display is a combination of radar and map. For example, it also shows shallows, which wouldn't be visible on a real radar. However, the captain also has nautical charts or a modern electronic display for such information. A small yellow line indicates the direction towards the docking and harbor exit fields.



Here's the entrance to New York. The fairway is narrow, and you can only see the shallow areas in the radar display. The shallows are modeled after the real ones in New York. Except for hovercraft or ekranoplan, colliding with all other ships when hitting a shoal (sandbank).

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It's advisable to avoid them. You can adjust the radar's range using the PLUS and MINUS keys on the numeric keypad.

## 12.2 Analog display

We use this term to refer to a group of instruments that the right captain needs. However, the display is only shown when you check 'Analog Display' in the maintenance menu.



The displays here are for the submarine in the Captain's Trainer. The upper left display shows how fast the ship is turning (here 5 degrees/min starside=S=starboard (portside = P = port)). Usually in deg/min for degrees/minute. However, in 'Cadet' mode, the inertia and rotation speed are altered, making it easier for beginners to maneuver. Only in 'Captain' mode do you have real values here, and then you also need the display as assistance, as the movements can be very slow. In the top right, you can see the wind speed, and in the bottom right, the direction from which the wind is coming. The depth gauge in the middle left is only visible on the submarine; here it's showing 27 meters submerged (submerging occurs automatically when speed is increased). The maximum depth here is 52 meters.

### 12.3 The speed and rudder controls

Seen below in the neutral position. Pushing the lever upward with the course keys (or better yet, a GAMEPAD) moves the ship forward. The large lever indicates the set speed, while the red triangle on the far right shows the actual speed. Ships are heavy and sluggish, so it always takes a moment to reach the set speed. The same applies to the rudder control to the left. The higher the difficulty level set, the closer the simulation comes to the actual inertia of the ship. Consequently, navigation becomes more challenging.



Here's the display for the Ekranoplan; it only has a bow thruster, none at the stern.

The rudder is also controlled with the cursor keys. If you turn the rudder to the left, the ship steers to the left from the perspective of the bridge, known as 'Portside' or 'Backbord' in German. The right side of the ship is called 'Starboard' or 'Steuerbord.' So, if you turn the rudder control to the right, the ship turns to starboard.

Below are the lateral thrusters, which are only available on more expensive ships. The bow thruster is controlled with the left/right cursor keys while holding down the Ctrl key. The

stern thruster is operated with the left/right cursor keys while holding down the Shift key. On the gamepad, the right block is responsible for this function. However, you can change the assignment in the maintenance menu at any time.

Older ships often lack both lateral and bow thrusters! Maneuvering them requires more effort.

## 12.4 Berthing

When maneuvering the ship manually into the port (which earns you a status point in every new port!), you must dock within the yellow outlined area. Once the ship is parallel to the quay within the target area and stationary, the berthing maneuver is successfully completed. As a cadet, some tolerance is accepted, but as a captain, you must dock quite precisely and ensure that all engines are stopped (including the thrusters). Press the HOME key (POS) if you don't have a gamepad to achieve precise zero settings for all controls. The direction of the berth is indicated by a yellow line on the radar screen. Pressing F3 provides an overview of the entire map, which enlarges as you get closer to the berth,



## 12.5 Casting off

You depart from the harbor by passing through the yellow-bordered target area. Reversing is not penalized. You can also depart with tugboat assistance, but that costs money, and if your funds diminish, you may be forced to maneuver manually. The direction of the destination is indicated by a yellow line on the radar screen. Pressing F3 provides an overview of the entire map, which becomes larger as you approach the destination.



## 12.6 Camera position

Depending on where you look, steering the ships can be more or less difficult. The simulation provides you with all the possibilities that exist on a ship and also some positions that make things easier or more interesting.



Top right of the screen is a list of camera positions. Clicking the arrow opens a list where you can select the desired camera type. If the list is not displayed, you can make it visible by pressing ALT-X, or directly switch between the different cameras using the mouse. The numeric keypad also provides direct access to the camera positions.

There are slight differences. The extra cameras can only be toggled using the left mouse button (or Gamepad button 3). You can access the interior of the bridge only with the numerical key 5 on the keyboard or through the menu above.

If the mouse cursor is not displayed, you can move the camera back and forth, up and down using the mouse (with extra cameras, also forward and reverse). For example, the tracking camera can be moved around by  $\pm 90$  degrees using the mouse. If you want to view the ship from the bow, you must use the 'Reverse' camera."

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There is also a special camera called the 'Free Camera,' which can only be activated through the list box on the screen, as it was originally intended only for scene designers. With this camera, you can freely move the camera around the scene (the mouse wheel is used for moving away from and towards the target, and the rest rotates the image as if it were a sphere when holding down the left mouse button). However, the target remains fixed at the point where it was last positioned by the previous camera setting. You can use this camera to overview an entire scene.



Not all ports in the current development stage of Ports Of Call are depicted in such detail as Sydney, the port in this example. However, all ports correspond to real ports. The navigational challenges are portrayed with authenticity throughout. Currently, alongside Sydney, New York, Gythion, and Las Palmas (only in the trainer) also showcase with more details.

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The side cameras (from the so-called stern) assist with docking.



The forward view has a tourist aspect.



F3 provides an overview. Your own ship is marked in red. The destination berth is outlined in yellow.

### 12.7 Extra ships

UFO - Super fast, similar to controlling a hovercraft and Ecranoplan, use it to learn navigation. Interior view also available. Can also be used as a freighter, very fast but expensive, capable of transporting many containers despite its 30-meter diameter. Secret of the technology.



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DRAKO - a Viking ship, a fictional replica used as a cargo vessel, Old Style with automatic rudder movements. Have fun parking it, avoid colliding with the oars. Can also be used as a cargo ship, very fuel-efficient but slow!

## 12.8 Locks

At some ports, there are also lock systems: Antwerp, Bremerhaven, Panama, Veracruz, and Zeebrugge. To open a lock, you enter the entrance area and wait there until the lock is open (bell sound stops). Then you must move to the center of the lock and stay there. First, the gates are closed again. The water level then rises or falls accordingly, after which the opposite gates are opened, and you can exit the lock.



(Beispiel Antwerpen)

### 12.9 Weather

With ALT-W, you can display sliders to change the weather. Note: before that, the cursor must have been activated with ALT-X.



### 12.9.1 Fog Settings



The fog is adjusted with a total of four sliders: a) Fog Density



Same setting as above but the density is reduced. The fog is now only slightly transparent.

b) Fog Area



You can set the start of the fog.

c) Fog Height The layer height of the fog can also be adjusted.

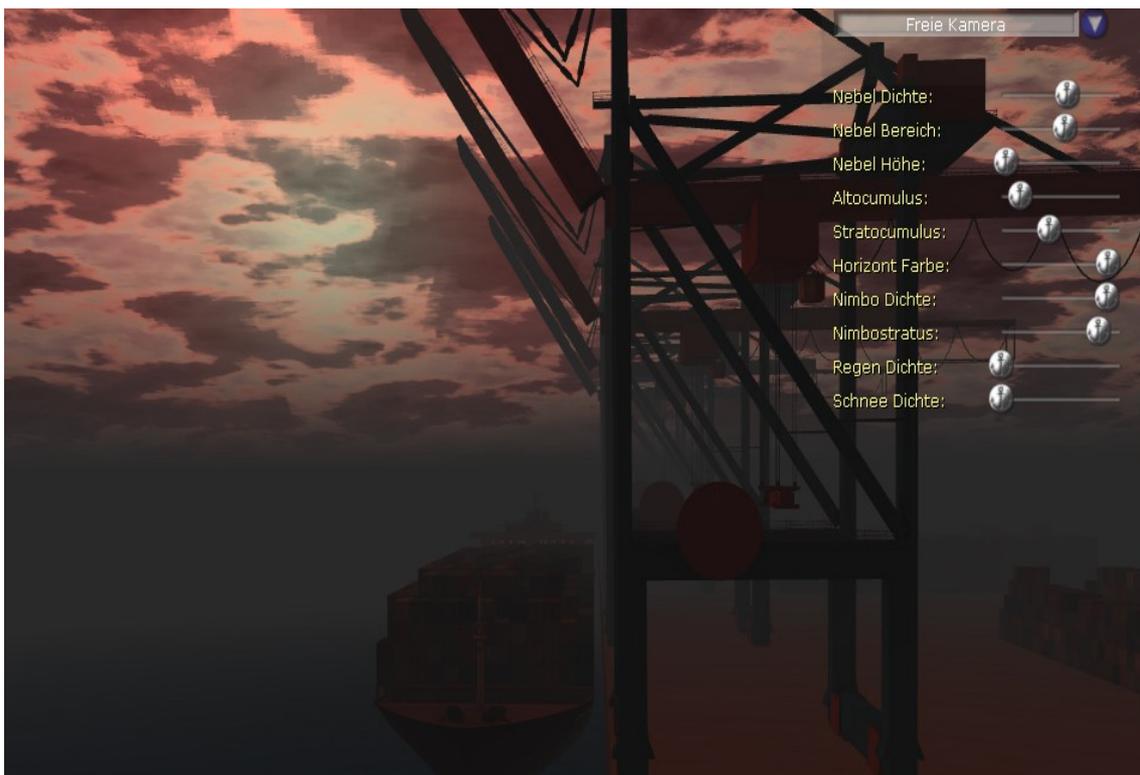


d) Horizon Color

This determines the color of the fog, or rather the brightness. Of course, all of this is also dependent on the position of the sun.



With the controls, you can create an interesting atmosphere. The simulator automatically adjusts the weather conditions based on the season, time of day, and location of the port (if defined). However, you can always adjust the settings manually.



### 12.9.1 Clouds

For clouds, we have 5 controls that determine their appearance. The highest cloud layer in our simulation is the Altopcumulus layer. In reality, there are of course more layers, but this cloud type seemed suitable for most scenes. Use the slider to adjust the density accordingly.



The next cloud layer you can adjust is the Stratocumulus layer, which can be denser.



The third layer consists of the bad weather clouds, in our case, the Nimbostratus. The 'Nimbo Density' slider determines the transparency, and 'Nimbostratus' controls the spread. Both sliders need to be adjusted to produce an effect. The density of the clouds is also influenced by the horizon color.



You can combine everything together, and the position of the sun also plays an important role.

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### **12.9.1 Rain and Snow**

The last two sliders are used for this purpose, allowing you to mix rain and snow density. It's advisable to set an appropriate cloud image for this.

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### 13 Captain's Training

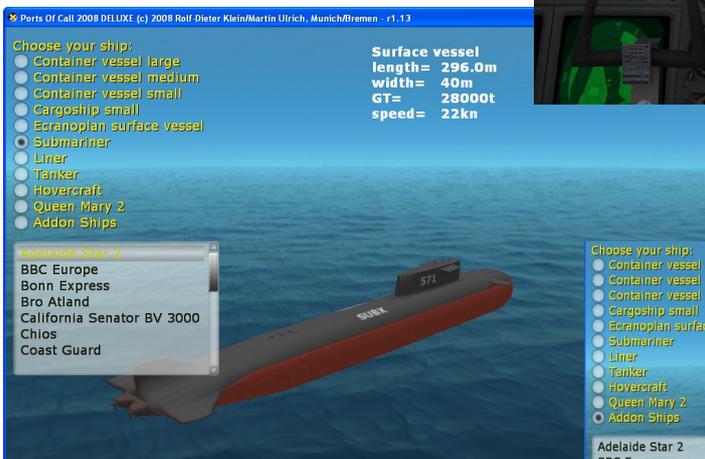
If you choose the Captain's training, you will be given a selection of ships to practice with. For example, this old ship from 1950, the 'Adelaide Star' .



you can of course select any other ship from the list.

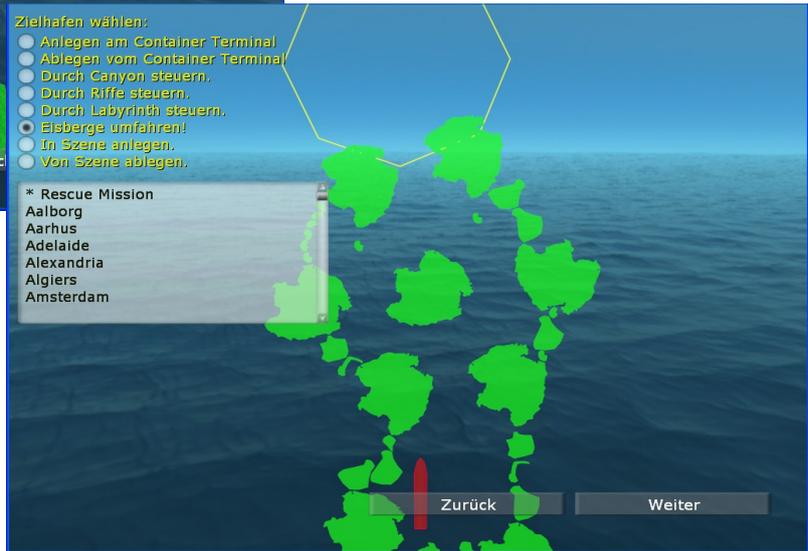
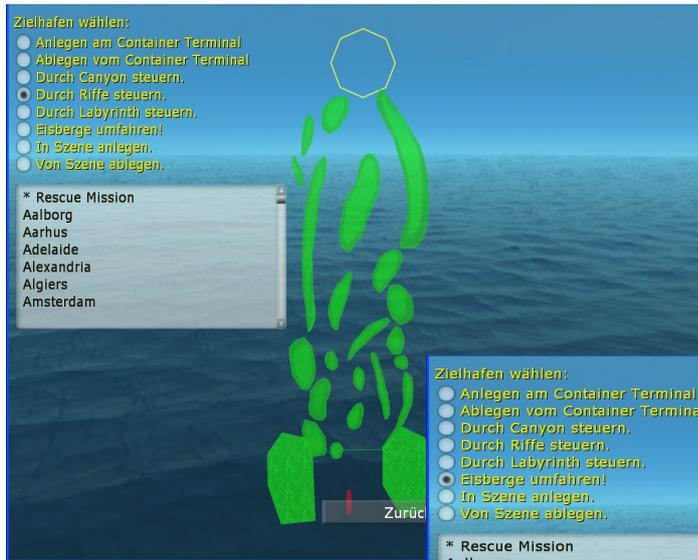


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To name just a few ships. Now, you'll choose your practice tasks again from a list.

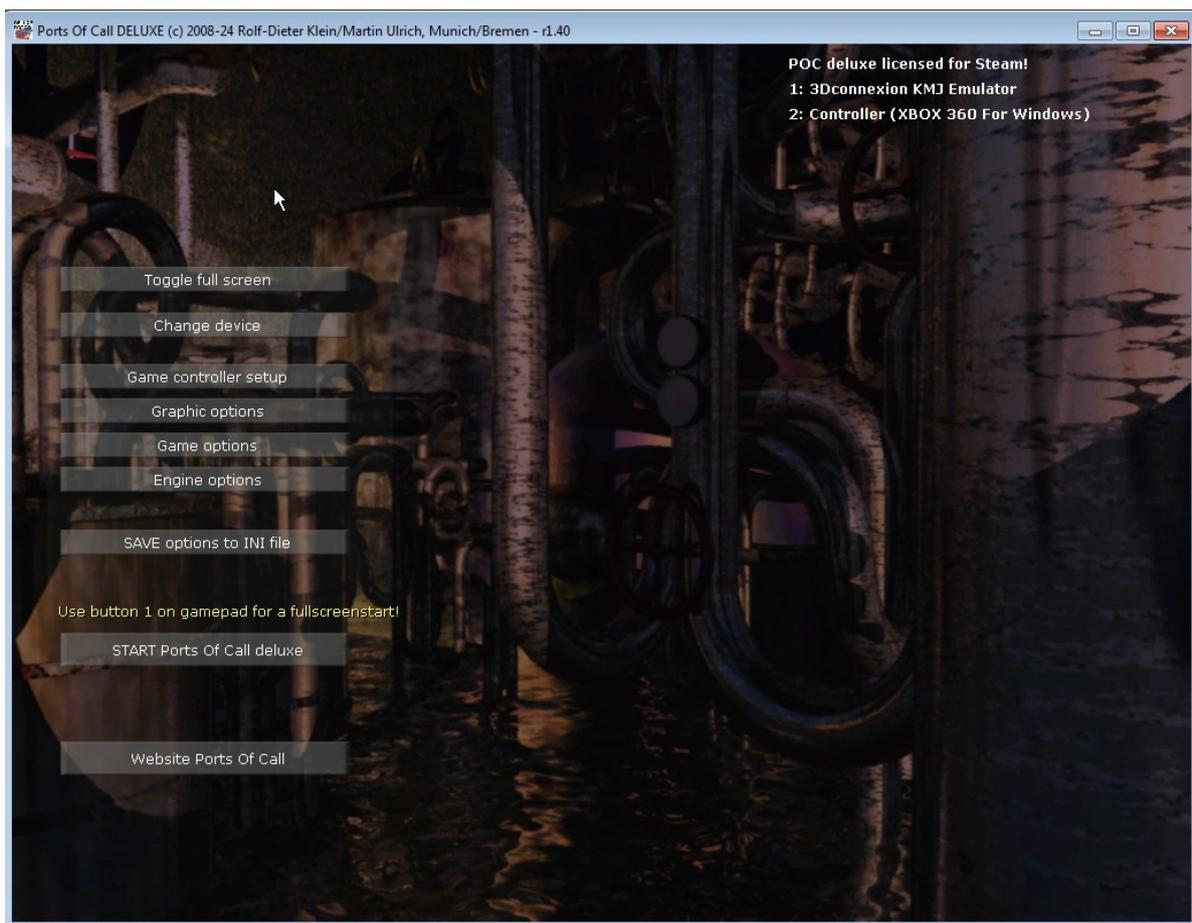




## 14 Maintenance

Normally, you don't need to go through this bulkhead. But if you want to fine-tune your game, you'll find the necessary settings here. Pressing ALT-M also takes you directly from the game to the submenu Game Settings, where you can adjust things like volume, make optimizations, and more.

In the top right corner, you can see which game controllers the program has detected. It supports up to two simultaneously. On the left side, you'll find buttons.



### 14.1 Toggle Fullscreen

Use these buttons to switch the display of the game to fullscreen mode or, if fullscreen mode was previously active, back to windowed mode.

Important note: When playing, it's preferable to switch to fullscreen mode, as animations may stutter in windowed mode (this is OS-dependent) management is performed approximately every 1-2 seconds for about 200ms, resulting in potential stuttering. This effect is less noticeable on faster computers). However, windowed mode can be convenient for a pure economic simulation, allowing you to easily take notes on the side. You can toggle between modes during gameplay by pressing ALT-Enter.

Attention for LINUX, if you scale the screen using PROTON, sometimes its not correctly updated, switch between fullscren and windows this should correct the problem.

If you have a dual-monitor setup, you can move the game to the other screen in windowed mode (typically the non-primary screen). Please note: Doing so will trigger another loading process with a progress bar. Please wait until it completes. Moving the game may take a while as graphics need to be readjusted. It's best to perform this action only on the main menu or on the world map, as animations may temporarily become misaligned otherwise.

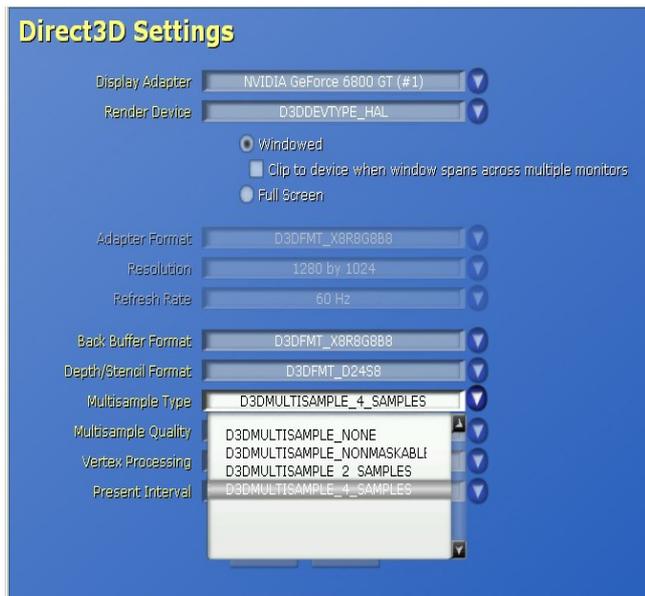
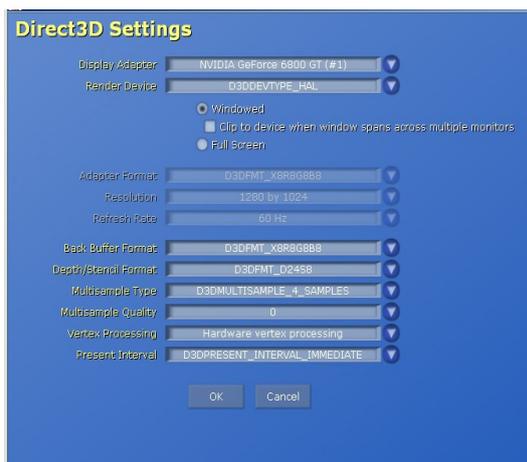
## 14.2 Change Device

This section is for professionals. You can select from the available graphics cards (Display Adapter) and render devices. If you don't understand the other terms, it's best to leave them alone. Typically, everything is set correctly.

The Multisampling setting is crucial here. If you have a SLOW card (either older, mobile editions, or a pared-down card), set Multisampling to 0. With a high-performance card, you can use higher values than the default, leading to smoother edge rendering, etc. (but this consumes memory and processing time). You can use SAVE INI in the Admin section to save this setting for the next launch.

It's also important to lower the resolution when in fullscreen mode with a weak card (e.g., Mobile with 256 MB or less). These cards usually can't handle resolutions like 1600x1000, although laptop screens may support them. This setting isn't saved permanently but can be adjusted in your graphics card settings. You can also improve the framerate by disabling effects such as reflection, shadows, radar, etc., in other menus.

The example on the right shows the expanded menu for Multisampling (which is actually



used for antialiasing).

### 14.3 Game Controller Setup

helps you to configure your game controller the way you prefer to use it. The highlighted windows are usable.



Below on the right, you see the speed indicator. Simply try out which field switches which function. If you click on 'inv', you swap left and right or up and down. Changing a setting and clicking on 'FF' activates the Forced Feedback of the game controller (if available). So, if you have, for example, a Rumble Pad, the rumbling is also supported. It's important to assign all functions directly and not leave them as invisible defaults; otherwise, nothing will rumble! You can assign a maximum of two game controllers simultaneously. For instance, Gamepad + Flightcontrol X52, and thus perform a mixed assignment.

Saving profile is an important switch. It preserves your settings. If another controller is added, the program searches for existing assignments and tries to make an automatic assignment as optimal as possible. However, you can change these assignments again.

#### 14.4 Graphic Settings

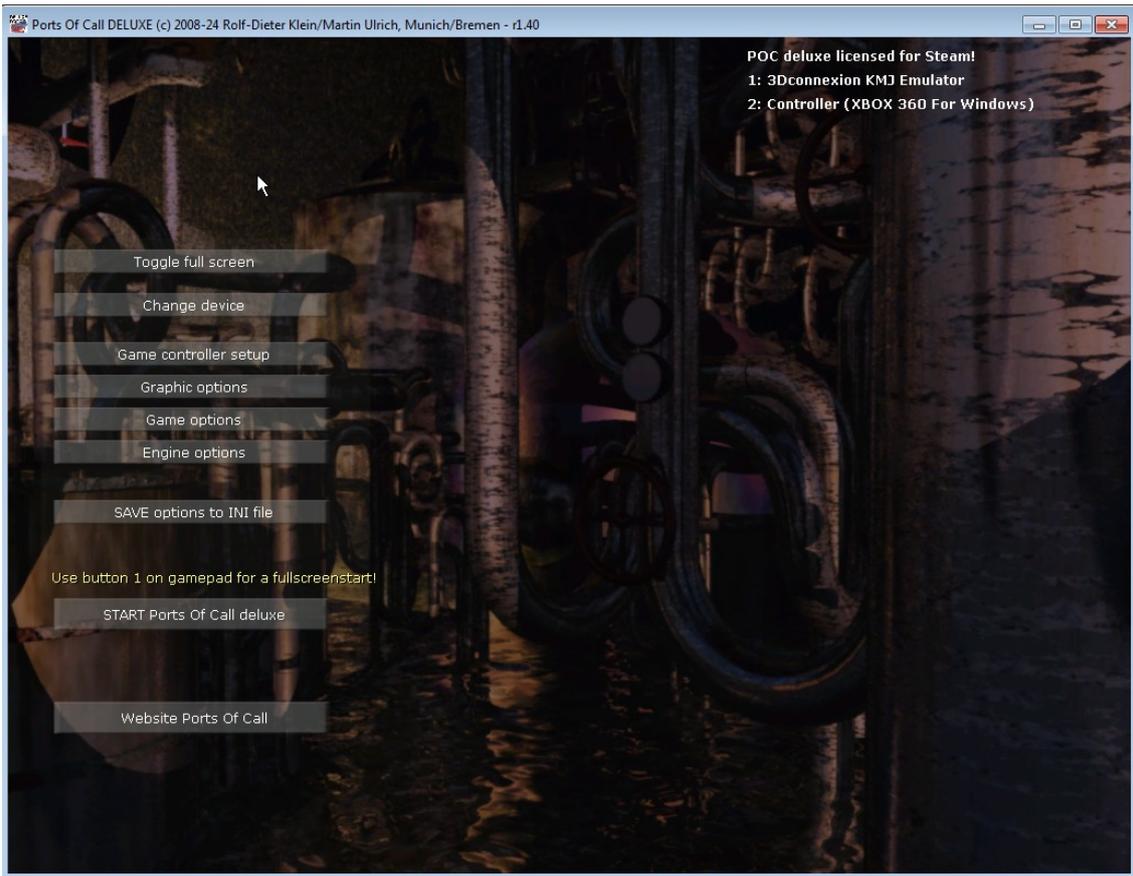
Change the display effects 'Reflection', 'Shadows', and 'Spray'. Normally, all of these are enabled. If the frame rate (video stuttering) is too slow, then first turn off Reflection and also Shadows (when both are off, a simpler water model is used).

The screensaver is optional. With the screensaver, you can specify after how many minutes the Ports Of Call 2008 screensaver should start. It uses the last ship used in the game.

Below, you switch between Stereo and Mono. This switching can also be done with the key combination Alt and S. With Alt and Z, you access the menu to set the stereo effects. It is advisable to do this for all camera perspectives in the game (including Simulator and also Office, Bridge, Captain's Wall, etc.). Then, go back to the Maintenance menu with Alt and M and click 'Save settings in INI'. Your stereo settings are now saved. However, it's recommended to adjust the slider settings only in the current game, not in the Maintenance menu. On the left, the selected camera is displayed (e.g., 'Office' when switching from Office to Maintenance).

The settings you should make are under the slider 'eye', your interocular distance. Under 'at', you set your eye-target point (vanishing point). And 'sc' changes the 3D zero plane. Eye and at together affect depth perception. See also Mono and Stereo on page 18 .

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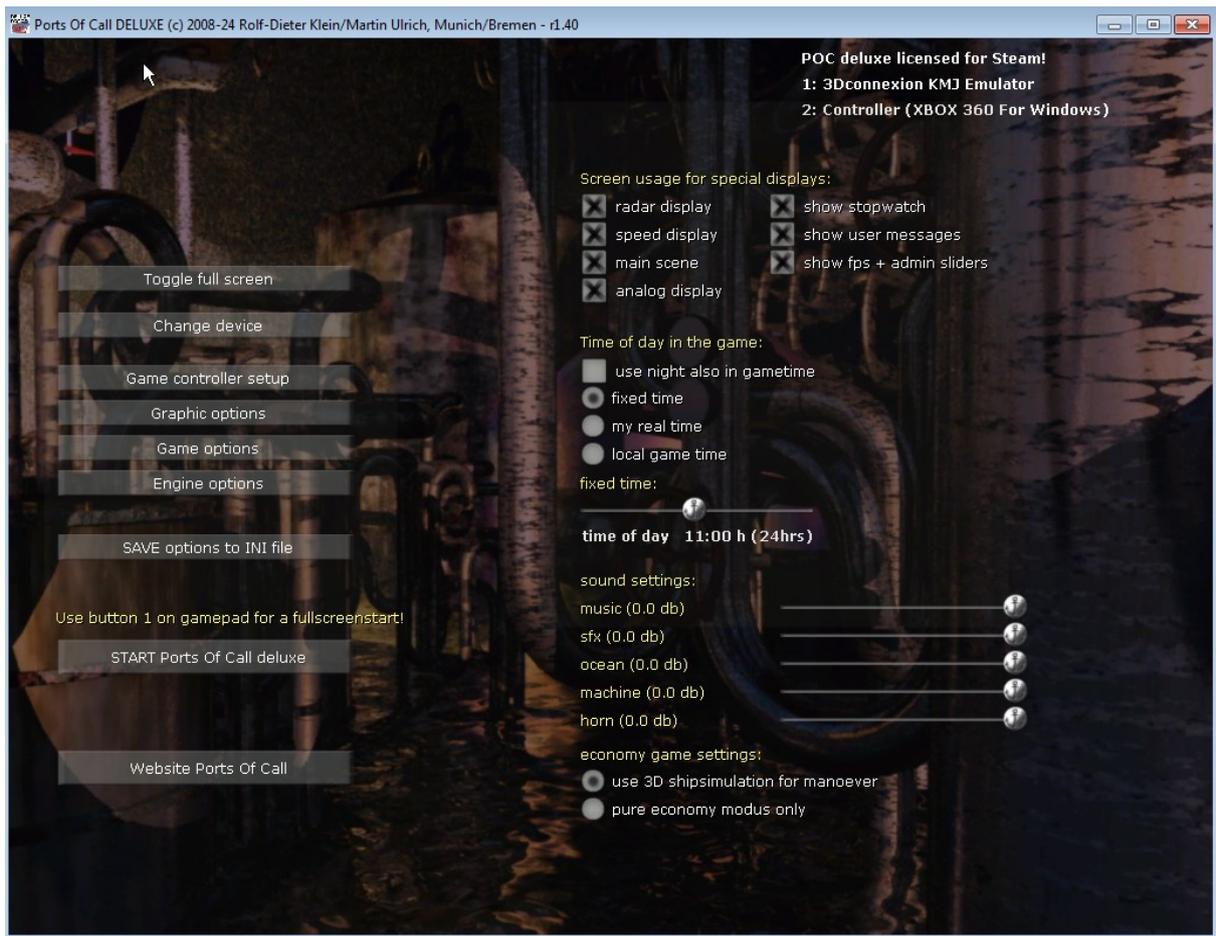


### 14.5 Game Settings

turns special displays on and off: Show Radar; Show Speed; Main Scene; Analog Display; Stopwatch; User Info and FPS (Frames per Second in the Simulator)

Show Admin Slider. This affects the display in the Simulator. You can also hide the main scene and then only Radar, Speed Controller, or Analog Display will be shown. The combination of Radar+Speed Controller can be used simultaneously. This allows for smooth gameplay even on slower graphics cards. This feature is also intended for a future expansion, where a separate computer can be used as a slave display in a network. If you hide the mouse with ALT-X, you can adjust the zoom factor by moving the mouse

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"The analog display is also an interesting addition, and it can be overlaid onto the scene. Depending on the ship, the instruments are displayed

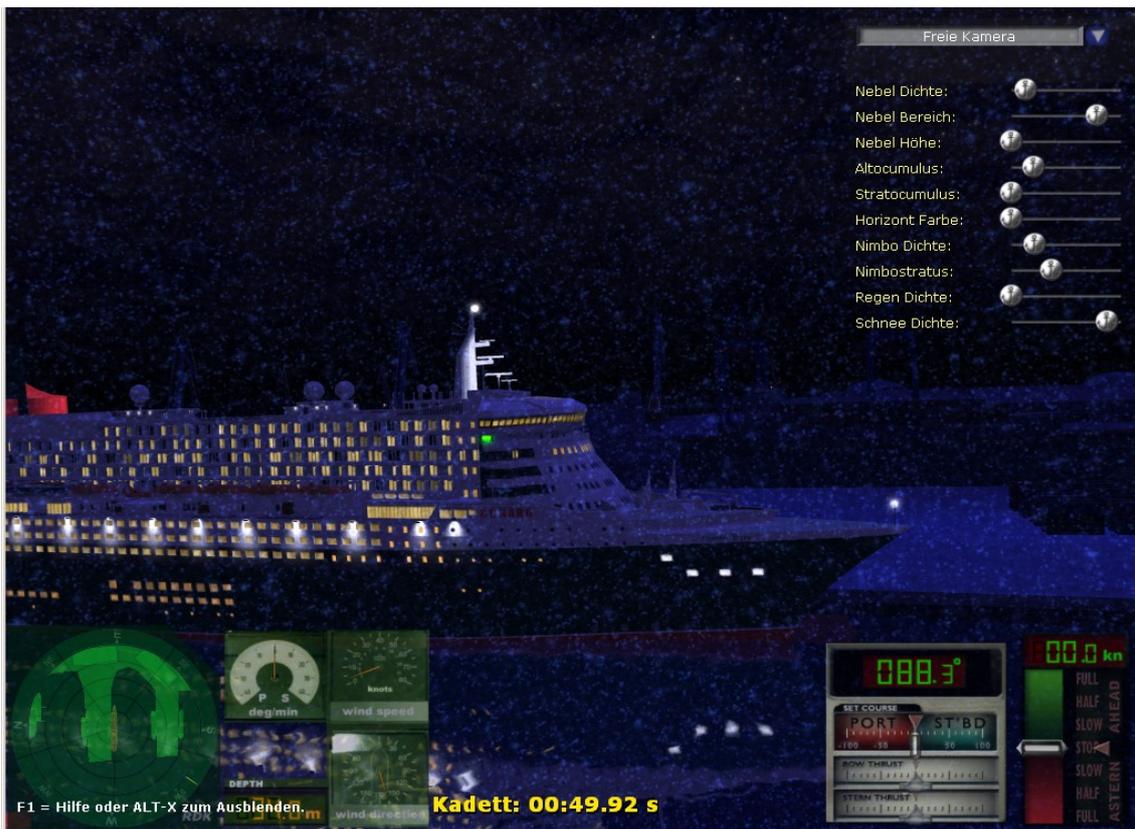


Some scenes



Additionally, you can adjust the time of day. The easiest way is with a fixed time, set using the slider. At 2:00 PM (default setting), it's naturally bright, and visibility is good. If you choose the computer time (set on your gaming computer), the lighting corresponds to the actual time. However, the change will only take effect upon starting a new simulation scene. You can also adjust the position of the sun using the keys (PAGE UP and PAGE DOWN, as well as INSERT and DELETE). Selecting the local time means the system might even require you to perform a docking maneuver at night — and that's not so easy.

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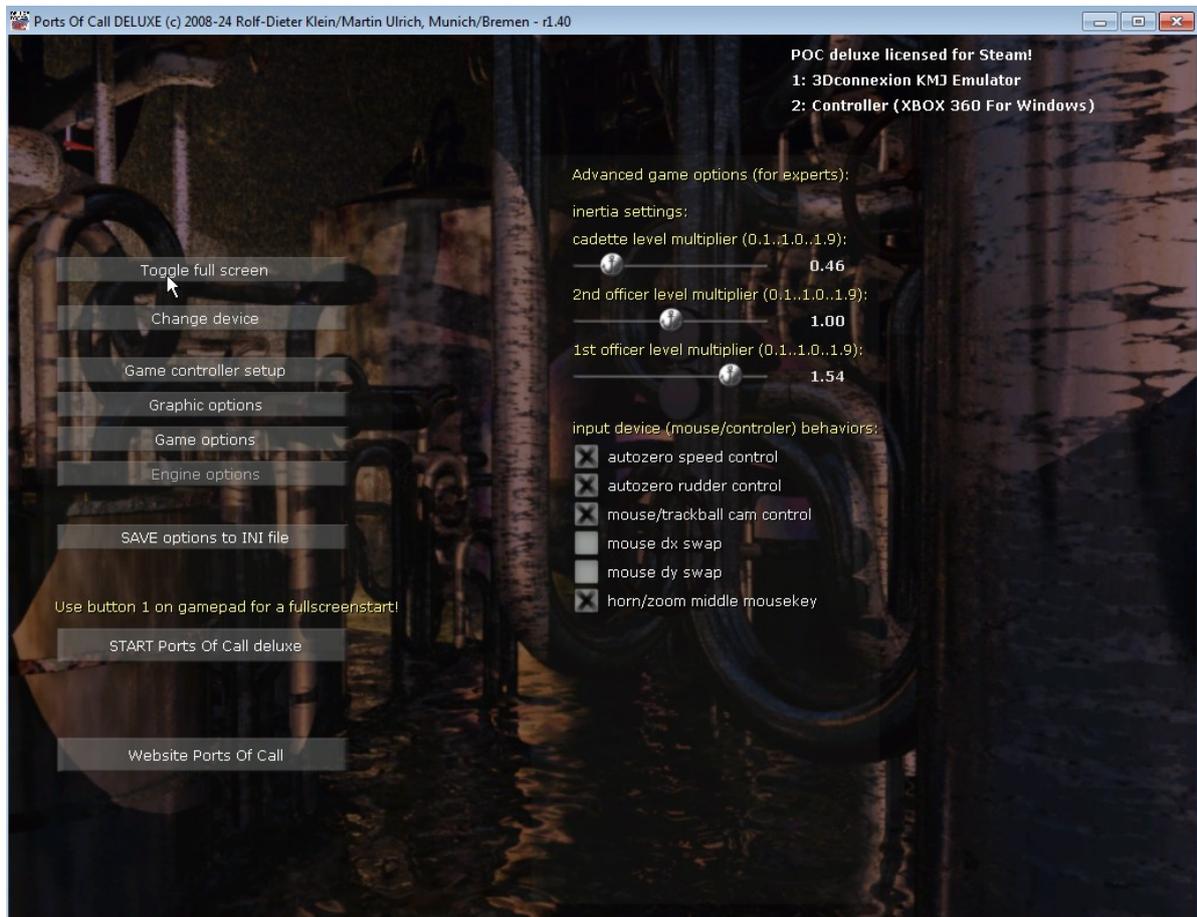


Here too, remember to save settings in the INI file, so they will be used again on the next startup.

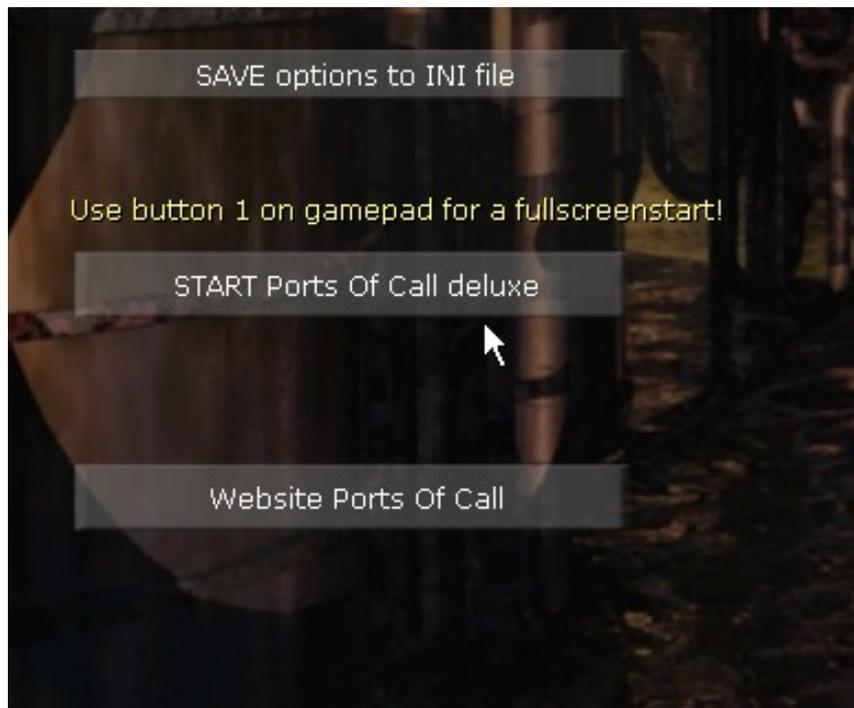
## 14.6 Expert Settings

Expert settings, as the name suggests, require some experience with Ports Of Call. Here, you can delve into the depths of the game and make changes accordingly. Inertia is an important parameter for the behavior of the ship. Here, you determine how quickly the ship responds to changes in throttle setting or rudder position. The greater the inertia, the more foresight is required in steering. Because a ship that is turning doesn't immediately stop just because the rudder is back to center. The larger the ship, the more sluggish it is, and the more time it takes to respond. So, be careful with these settings - they are finely tuned as they are.

You can also influence the behavior of your input device. We've set it up so that throttle and rudder return to zero when you release the joystick. You can select the camera with the mouse or a trackball. If you want to invert mouse movements, choose Mouse dx Swap for horizontal and Mouse dy Swap for vertical. And if you want to zoom or sound the horn with the middle mouse button: There you go.



Finally, please save your settings by clicking: Save settings to INI file.



ou can start the program directly by clicking on 'START Ports Of Call deluxe' (Note that if you entered the menu with ALT-W, the game progress will be lost afterward!)

If you have a gamepad (or joystick) connected, you can also start the game by pressing button 1 on the gamepad. This switches to fullscreen mode without the cursor. You can then use the mouse to rotate objects (also in many start menus) when navigating to the Captain's Trainer. Buttons 3 and 4 are used to select options, and 1 and 2 are for navigation. ALT-X toggles the mouse cursor on or off.

The 'Current Game' button appears only if you have switched from the game to the maintenance menu using ALT-W. Then, the game will resume from where you left off.

'Website Ports Of Call' opens your web browser. Note that if you were in fullscreen mode, the screen will automatically switch. You can also do this manually at any time using ALT-TAB.

On the website, you can find updates and patches for the game and learn about new features. It also automatically checks for updates available for you.

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**Rolf-Dieter Klein**

München, den 3.5.2024

**15 Flag alphabet :**

